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THE MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

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Letter from our Paris Correspondent.

HOTEL DE L'ATHINIE, PARIS, MAY 15th, 1878.

Editors Maryland Farmer:—The great event of this week, so far as the Exhibition is concerned, has been the formal opening of the German Art Gallery, which, up till yesterday, was accessible only to the favored few. By an edict of Emperor William, the exhibition of pictures representing scenes from the late Franco-Prussian war was prohibited; a courtesy to the French which was reciprocated by Marshall McMahon by eliminating all French paintings commemorating this war from the French Gallery; and as the German artists of note have been largely engaged, during the last four or five years, in putting German victories upon the canvas, considerable speculation was indulged in as to *what* was concealed behind the maroon colored screens at the entrance to the section. The selection proves to be superb, and decidedly superior to the French, if not to the English; and the hall is fitted up in a style severely beautiful. If it had not been for Bismark's mistake of annexing French territory in 1871, the Milliards would have been overlooked, and von Moltke pardoned for getting rid of the Empire of Sedan. Waterloo is forgotten because it exacted no Venetia; and there is, or would be, a disposition on the part of the French people to "shake hands across the bloody chasm." were it not for the mourning figures of Alsace and Lorraine!

As in the Exhibition of 1855 the sewing machine was the great attraction, and in that of 1867, the Krupp cannon, so on the present occasion the so-called "Prince of Wales' Pavilion" is the chief center of attraction. This magnificent structure, painted red, with copper cupola, is very striking, and the equestrian statue of the Prince of Wales is admirably placed. The centre of the Indian gallery gives the best view of the Trocadino. From that point, the Seine is invisible, the Champ de Mars and the Trocadino Palace being apparent-

ly connected by an unbroken series of lawn, flowers, and fanciful erections. The French talent for improving gardens has here achieved a great success, and the Indian section, with its luxury and oriental coloring, is very fitly placed in view of this wonderful panorama. The Prince of Wales's collection is interesting, and it will certainly be one of the chief objects of curiosity to all who visit the Exhibition.

Writing of this Indian collection reminds me of a story which has been going the rounds of the press here and will, I think, bear translating. There is a large French Indian Company, something on the plan of the famous London East-Indian Company, which has a magnificent display of Indian shawls, silks, &c., on exhibition. This firm conceived the idea of importing two of their native Kindoo workmen from Madras, and set them to work at the exhibition, so that people could witness the interesting process of making cashmere shawls. One of them, Behadour, spins the cashmere with his hands; the other, Chuder, weaves it. When they arrived in Europe, their clothes were in such a condition that they were obliged to order new ones. In the meantime, the firm lent them splendid costumes from their warehouse. Behadour and Chuder forthwith hired a carriage, and set off to visit Paris. They had great success, being everywhere taken for great personages from India. In the theatres, they were shown to private boxes, in the streets, they were watched with admiration, and at length a newspaper announced the arrival of two India Princes on a visit to the Exhibition. Unfortunately the day of the opening arrived. Their employers ordered them to work. Behadour and Chuder refused, preferring the *role* of Princes and idols of the crowd. Imprisonment was threatened; they still held out. At last, repatriation by sea, the old way, was threatened, and as they suffered much on the voyage hither, this threat had the desired result. Behadour and Chuder are now working

with such ardor that on entering this compartment, I was obliged to shake them in order to get them to look up. What must be passing in their minds? After having seen European civilization through the prison of princely honors, to sink back upon a labor at which they earn ten cents a day, on condition of their not stopping for a moment! What a fall!

The warm wether is a godsend to the café and restaurant-keepers, who are busy from morning till night supplying the wants of thirsty visitors. At the American side-bar, in the English section, there is a sign informing customers that they make 103 different varieties of "mixed drinks"—but alas, there is not so much as a rocking-chair or any other morsel of wood for whittling, the settees being all of iron with steel spring seats! Those who desire an ice should seek it in one of the Italian or Spanish café's on the grounds, and will not regret having to walk a quarter of a mile to get it. At the Russian restaurant, a glass of "Kumys (an effervescent beverage made from mare's milk,) may be had for five sous; and at the Hungarian Garda, they serve you an excellent luncheon, with a bottle of wine thrown in, for three francs.

There is one part of the Exhibition of which the original idea was, that the history of architecture in every country should be practically illustrated. As France takes one complete half of the building for herself, the immense space at her disposal—that is to say, the wall front of the entire length of the main edifice would have enabled her to show in the amplest fashion, the architecture of the country in every age; but the magnitude of the task seems to have frightened the officials, for they have utterly abandoned the scheme, and their facade is a flat, unbroken wall of glass. The foreign countries, however, have stuck to the original project, and in their half of the Exhibition each section has a sort of architectural national signboard in the form of a characteristic building. The Swiss villa is the most picturesque of these structures, and next to it comes the Japanese and Russian houses, and then the half-timber English cottages. As about one-eighth of the entire space is allotted to England; that country has been enabled to show five specimens instead of one. The most interesting is the Prince of Wales' Pavilion, to which I have already referred briefly, and which is built at the expense of the British Commission. The furniture, fittings and the entire internal decorations have been executed by Messrs. Gillow, of London, from express designs. The handsome entrance hall reaches up to the roof. There is a large dining room, a drawing room, with a boudoir for the Princess, and a private sitting room

for the Prince on the *reg de chassee*, and several more rooms, on the first floor. The house is actually used for business purposes by the Prince of Wales, by the secretary of the British Commission, Sir Cunliffe Owen and by the Commissioners. But in the absence of the Prince, certain rooms are open to the public. The walls of the dining room are panelled in Mosaic wood-work, and the space above the panels is filled with tapestry, depicting episodes from the "Merry Wives of Windsor." Above the fireplace is a tapestry portrait of the Queen. All this work has been executed on the Royal Windsor Tapestry Manufactory. Minton supplies the China, and Elkington the silver reponse work. The most complete harmony of style has been maintained throughout the house, and the effect is superb. The old English half-timbered house, which I have mentioned above, is built by Messrs. Cubitt, "alte London for the Universal Exhibition holden alte Paris," as the inscription informs visitors. It is built of wooden frame work, filled in with decorative plaster panels, after the fashion of the old houses at Chester. Messrs. Doulton & Co., have made an interesting exhibit by building a complete house of red brick and terra-cotta, which is very effective. The facade of the United States Section is a *la dry goods box*; that is the nearest style of architecture to which I can compare it; indeed it would be painfully plain if it were not for the gaudy painting and the numerous coats of arms, representing all the states, with which it is embellished. It is, however, convenient and tolerably spacious, the rooms on the ground floor being furnished as reception rooms, where registers are kept for visitors to enter their names in, while those up stairs are set apart for the use of members of the commission and their clerks.

LIONEL.

THE EARLY SPRING.—I notice with pleasure the article in the *New England Farmer* on the comparative earliness of seasons. By my diary, I find that the spring of 1865 was the earliest for more than thirty years. On the eighth of April of that year, I planted corn and beans, and they came up and grew well. On the 19th of the same month, I cut grass thirteen inches in length on one of my lawns. The cherries, that year, commenced blooming April 23. My records show the present spring to be twelve to fourteen days earlier than in 1877. I am inclined to believe that 1865 was the earliest season since 1775, when, on the 19th of April, it is said the soldiers, on the march to Concord, adorned the muzzles of their muskets with branches of cherry blossoms broken from trees, as they passed through Roxbury—so tradition has it.

MARSHALL P. WILDER,

Dorchester, May 17, 1878.

For the Maryland Farmer.

HISTORY OF AGRICULTURE.

BY PROF. J. D. WARFIELD, A. M.

When our early settlers began their Herculean task in these Western wilds, they were perfectly ignorant of the soil and its requirements. Harassed by Indians and wild beasts, there were lacking seed, implements and capital. Hence, but slow progress was made in colonial times. In 1747, a Connecticut clergyman, Jared Eliot, published some valuable essays upon field husbandry, but, practically, few improvements were made till after the Revolution.

Several agricultural societies were established from 1784 to 1792. Even then, reading was not general, and "book farming" was looked upon as a dangerous innovation. Sons planted, tilled and harvested just as their father had done before them. Stock was not improved, rotation of crops was not thought of, labor saving machines were resisted, wooden ploughs were used, the sickle and the flail secured the harvests. The first patent for a cast iron plough was obtained by Newbold, of New Jersey, in 1797. The idea of our present mowing machine was in existence 1800 years ago. Knives attached to carts were then used, but it is only within the last half century, that the idea has been successfully carried out. To-day the reaper and mower are as much types of the present, as the sickle and flail were of the past.

The progress made in agricultural chemistry is no less marked. The most useful discoveries in the science have been in the last 40 years. What Young, Davy and Liebig advanced, modern experimenters have put into practice. Previous to 1840 we are indebted to Saussure and Humphrey Davy for much of our developed theory. Since that time Prof. Liebig has contributed more than any other man. Artificial fertilization so much resorted to now finds its origin in the following words of Liebig:

"To manure an acre of land with 40 lbs. of bone dust is sufficient to supply three crops of wheat, clover, potatoes, turnips, &c., with phosphates; but the form in which they are restored to the soil does not appear to be a matter of indifference. For the more finely bones are powdered, and the more intimately they are mixed with the soil, the more easily they are assimilated. The most easy and practical mode of effecting their division, is to pour over the bones, in a state of fine powder, half of their weight of sulphuric acid, diluted with three or four pints of water."

His idea that sulphuric acid—the vitriol of commerce—would make the neutral phosphate of lime soluble, and give it a powerful action in the soil, has led to the discovery of mineral phosphates. Previous to this, the compost heap was the only means of regenerating worn out lands. Immediately after this, superphosphates were manufactured, by and through formulas given by Prof Johnson. Guano has only come into use since 1840. Twenty casks being received in England, experiments were, that year, made so successful that in 1841, 2,000 tons were used, and in 1845, 200,000 tons were imported.

The nitrate of soda, now largely imported from South America, is taking the place of much guano. Liquid manures, blood compounds, and mineral phosphates now play the part that guano so successfully played.

Prof. Way, of England, opened up another great question, when he asserted that fertile soils possess the power of absorbing and retaining alkaline substances, as potash and ammonia, from solution in water by means of a class of double silicates of alumina and lime or soda. These were the valuable contributions which established the science of agriculture. By means of chemistry, our plans for feeding both plants and animals have been improved. Knowing that the components of plants are identical with the blood and tissues of animals, there is always a constant interchange between the vegetable and animal world. A close observation of natural and artificial production leads us to the following general law: That, production largely increases wherever the principles of cultivation are understood and applied. The average yield of grain has nearly quadrupled wherever these principles have gained stonghold.

The average yield of wheat in the 11th century was estimated at only 6 bushels, per acre. The progress in improvement is now both sure and gradual. Societies, papers, discussions and legislation are now directing attention to the calling which feeds our nation. Nearly every State has its Agricultural College, through which the light of investigation is now illuminating the masses. The key which unlocks Nature's silent treasures is now in our hands. Way down in her vaulted caverns, heroic workers are bringing to light truths that must conquer. Upon these pictured walls are the tracings of foot-prints which ignorance and infidelity can no longer obliterate.

COST OF FENCING.—It costs \$58,000 to fence a 100 acre farm into ten equal enclosures, with a five rail post fence, and keep it in repair for fifty-six years, the length of time good rails last, adding interest to each sum as expended. A four rail fence would cost \$55,000; a worm fence would cost \$38,364 and an osage hedge \$13,617. These figures are food for reflection.—*Farm Journal*.

Farm Work for July.

Owing to our early season, the grain crops are nearly all harvested we presume when this number of our Magazine reaches our readers—The tobacco crop is no doubt planted, and the corn crop in that state which requires frequent working before laying by.

As there is no cereal that better repays thorough tillage, so also is there none that suffers more from neglect. Lightness and looseness of soil by frequent working, is absolutely required to admit air, dew and rain with perfect freedom from weeds and grass are the primary conditions to be observed in corn-cultivation.

HARVEST.

It should be remembered that Harvest does not end with the simple reaping and shocking the wheat, rye or oats, but should, by every consideration, be continued until the crops are secure in the barn or in well built stacks, or in the granary, which is the *best*.

TOBACCO.

If this crop is not planted now the land intended for it should be put to some other purpose, for the great amount of common tobacco on hand at this time, at ridiculously low prices, should deter any one from planting so late in the season, under the circumstances, or in planting a large crop even if it could have beedonen a month ago. Tobacco is not a paying crop unless it can be planted early, kept free from worms, cured well and properly handled so as to be of good texture, color and condition when offered for sale—No planter can afford these days to grow tobacco for a less price than \$8 per 100 lbs. as an average for his whole crop. He had far better make 1,000 lbs. at \$20 per 100 lbs than grow 10,000 lbs. at \$2 per 100 lbs. The more he produces at low prices, the farther he sinks in money returns of profits.

Let every candid reader ponder over the following statement we take from the Balto. Sun, and he will agree with our views, as to what is best for his interest.

All the tobacco warehouses in the city are at the present time taxed to their utmost capacity. There was never in the history of Baltimore a larger stock of tobacco on hand than at the present time. In addition to the regular warehouses other buildings are being prepared for storage purposes. The amount of tobacco in Baltimore June 1, 1878, was 34,216 hogsheads, against 19,793 for the same date of the previous year.

The record of the stock in Baltimore on January 1 for a number of years back is as follows:

1877	15,034	1857	4,584	1868	8,506
1847	32,416	1858	4,219	1869	8,779
1248	28,467	1859	8,354	1870	4,028
1849	32,751	1860	15,181	1871	7,345
1850	19,628	1861	24,500	1872	5,945
1851	10,617	1862	6,400	1873	6,908
1852	27,699	1863	9,722	1874	14,749
1853	11,759	1864	21,560	1875	11,627
1854	9,779	1865	20,938	1876	11,610
1855	3,733	1866	22,297	1877	23,340
1856	7,439	1867	17,645		

the heavy stock on hand now is largely made up of common tobacco.

BUCKWHEAT.

You can sow Buckwheat up to the 20th of the month. Every farmer should sow more or less of this grain—An acre or two will give him enough for his buckwheat cakes and his fowls—If he wants it for a green manure for wheat, it may be sown up to 1st of August and turned under as soon as it blossoms—It is a good green crop to serve as manure for wheat, with 10 or 20 bushels of lime broadcasted over the land, after the buckwheat has been plowed under.

POTATOES.

Do not fear the Colorado bug or beetle, use judiciously Paris Green and you will not be hurt by the pest—Keep the potatoes free from weeds by cultivators, plow, hoe and hand until they bloom, then hand-pull such weeds as may appear.

SWEET POTATOES.

Attend to these and do not let the vines take root over the hills and between the rows—This is one of the most profitable crops that can be grown.

ROOT CROPS.

These should be often stirred with the cultivator, horse hoe or hand tread—The ground kept light, and the roots thinned to proper distances in the drill;—that is 12 inches between beets and mangels, 6 between carrots and parsnips and Ruta Bagas. Prepare the ground for white turnips, as if to sow, and let it remain, so as to have all seed weeds sprout and come up, to be destroyed before the turnips are sown which should be by the 10th of August.

MILLET,

Sow a few acres of good, well prepared ground in Millet, Hungarian Grass or Golden Millet—There is a difference between these plants, though all are of the same family—The last named is the most to be prepared. This crop, whether for green feeding, as hay, or for seed and provender

is too valuable to be ignored in any system of farming.

Broad-cast corn sowing, or thickly drilled corn:—is a work to be not neglected after the 15th of the month at the latest, tho' good crops may be grown in some seasons after being sown as late as August—If you are likely to be scarce of hay or other provender next winter, by all means sow largely of corn and cure it like fodder, or bury it green after the French method, which method we were among the first Agricultural Journals to call attention some years ago, giving the whole process—very simple as practiced in France—translated by a lady from a French Journal for us.

ORCHARDS.

Peach Trees:—Examine the trees just below the surface of the ground and destroy the grub or large white worms—their presence is generally indicated by a gum that exudes from the body of the tree at the roots.

Caterpillars:—Be sure and destroy every nest and every individual you can see.

SHEEP.

Look well to your sheep—These are the days of the Dog, or "Dog-days" of old, though of late years dogs are more *sheepishly* inclined, hence the shepherd better be the more vigilant in keeping watch over his tender flock.

The worms that infest the head of sheep may be prevented by keeping off the gad fly and not allowing it to deposit its eggs in the nostrils of the sheep. This can be done by providing a trough and spreading over the bottom of it three times a week as much tar as will cover it and then sprinkle salt over the tar. In getting at the salt the sheep will smear the noses with the tar which will drive off the fly.

Garden Work for July.

The matters of chief importance to which we will briefly call your attention, for work in the garden this month are first, crops for a succession, to be sown or planted during the month, such as corn, peas, beans, small salading, radishes, endive, &c

Cabbage.—Plant out during damp weather or after a rain the cabbage intended for winter use. Flat Dutch and Drumhead Savoy are the best. The last cooked like cauliflower is almost as good.

Brocoli and Cauliflower.—Set those out and treat as cabbage, except that if the weather be dry at any time water freely. Do not sprinkle daily, but once or twice weekly a good wetting or irrigating them so the ground will become wet 3 or 4 inches. Liquid manure or manure water occasionally between the rows or hills will be of benefit.

Early Turnips.—Sow a bed of these and thin them out as soon as the rough leaf appears, and work them well.

Celery.—Set out the half of your main crop early and the balance toward the close of the month. Protect with shade for a few days until rooted. Do not let the plants suffer for moisture or work.

Pickling.—Sow cucumber, beans, cantaloupe, &c., for pickles.

Peppers.—Keep these free from weeds, and hill up slightly as they grow. Keep the ground light and moist, at least not droughty. Gather seeds as they ripen, and also herbs, and dry both in the shade; when perfectly dry put in paper bags; label each bag and hang up in a dry place. Keep the whole garden clear of weeds and neat in appearance. Do not neglect the growing or the bearing vegetables, and always be watchful to keep up a succession of crops, applying such manures as furnish the most agreeable and therefore most effective plant food suitable to each kind of crop.

High Farming Without Manure.

Col. W. W. W. Bowie—Dear Sir: You were kind enough to hand me a copy of six lectures of M. Ville, on Agriculture, delivered at the Experimental Farm, Vincennes; translated and published at Boston within the current year, under the direction of the Massachusetts Society for the Promotion of Agriculture. I do not, however, find in it anything beyond what has been made known to the public heretofore through your journal and otherwise. It is in cheap form, however, and is well worth the careful reading of every tiller of the soil who means to keep up with the progress of scientific Agriculture.

M. Ville claims, as you know, to have determined a "complete manure," that is, a manure which, on a barren sand will produce a maximum crop of wheat or any other of our ordinary farm crops. At the close of the lectures, is printed a table of results of certain experiments when the crops were "reaped and in the presence of a large concourse of Agriculturists." The product without manure of any sort was 193 lbs. of grain to the acre, or a little more than six bushels, with the complete manure, 2,464 pounds lbs. per acre, or about forty-one bushels; this being "the third crop from the same land without fresh manure since the first application." Another parcel being "the fourth crop without fresh manure since the first," gave 1,760 lbs. of grain to the acre, or nearly thirty bushels; the same soil without manure, 316 lbs. or a little more than six bushels per acre.

Experiments with colza and beet root are given with corresponding results.

The constituents of the "complete manure" are nitrogenous matter, phosphate of lime, potash and lime; while there are fifteen elements, organic and inorganic, entering into the the composition of all plants; it is claimed that all others are sufficiently supplied to the growing plant otherwise than by direct application. Some one or more of the four may be found in sufficient quantity in a given soil and in that case may be omitted from the compound. If phosphate of lime be found in the soil in due proportion, the other elements only need be applied; if in addition potash and lime are there in sufficient quantity, nitrogenous matter alone is wanted. But different classes of crops need these elements in different degrees. The grain crops need nitrogen especially, and an abundance of the other elements with this will not give a maximum crop, but leguminous crops, as clover and beans need little nitrogen in the soil, and with the other elements in sufficient supply may get all they need of it from the atmosphere. Root crops need phosphate of lime especially, and with this in full supply will in many soils find enough of the others. Rejecting the old method of soil analysis as inadequate, M. Ville offers his method of making the plant itself determine what the soil wants. The four elements must be present to bring a maximum crop. If one be withdrawn from the compounds as potash for example, and the manure still produces a maximum crop, it denotes that there is enough in the soil for the crop grown, and so of the others. Each farmer determines by experiment what his own land needs, and this governs his practice and economises his applications of plant food.

In this very brief notice of M. Ville's lectures, I have no idea of furnishing an adequate notion of what he sets forth, but I only hope to draw to it the attention of such of your readers as have not seen this publication. There is no subject of more interest to the farmer than that of feeding his crops economically. No thrifty man will neglect the sources of supply to be found within his reach on the farm; and many more cattle and sheep may be fed on our farms, giving profits in meat, wool and the best manure. But after all we may do, to farm most profitably we must go largely into the market of fertilizers. We will save our money there, if we know just what we want and buy nothing more, nor other than we want.

Very respectfully,

N. B. WORTHINGTON.

For the Maryland Farmer.

Husbanding Fertility.

Practically, the success of the farmer depends very largely upon the waste or saving of fertilizing substances. The operations of the farm may be likened to the filling and discharge of a hogshead at the same time. Thus, a hogshead is partially filled with water and has a pipe whereby water is received, and another by which it is discharged; now it is clear to be seen that if the discharge pipe, conveys more water than the receiving pipe, in process of time the hogshead will be emptied; but if a change is made and the receiving pipe increased in size, or if other smaller pipes be added for the receiving of water, so that there is an excess over the discharge, then the water in the hogshead will continually increase. The farm may be likened to the hogshead, and its natural fertility is the water contained therein. Cultivated crops are the discharge pipe, whereby it is drained of its fertility; the fertilizers applied are the receiving pipe, which adds to the original stock; but like the case in illustration, if the amount of manurial substance applied contains less fertility than is taken from the soil by the crop, then the farm is in process of being reduced to a state of sterility. Now as to fertility there are upon every farm a number of little streams conveying fertility, but are not conducted so as to, be made available to the farm as a whole, or else what is worse, are virtually to be classed as discharge pipes, and what is wanted, is to change the course of these streams, so that their invigorating influence may be felt in the proper course. There is no high road to eminence in agriculture. Success depends upon the application of fertility and a judicious system of tillage. It is an old maxim that success upon the farm depends upon three things and these are manure *manure MANURE*. As the heading of this article might indicate these are upon every farm, substances shall, although possessing fertility, are, for an imaginary want of time, or some other cause allowed to go to waste. The excuse of want of time for the saving, is not sufficient, for many are the hours that the farmer spends in a manner worse than useless, at the corner grocery or some shop, in which all the labor in this time could be easily accomplished; or if not, it would be economy to take the time from some other direction of farm labor, reducing it in that direction, that the manurial substances may be saved. This idea may have been written upon before, and many times, if so, the neglect that still exists only proves the necessity of giving "line upon line" and "precept upon precept" until the

persons to whom the same is applicable will take heed. Every farmer of any pretensions could raise more or less poultry, for the advantage that comes from having a constant supply of fresh eggs and chickens for the table. In doing this is afforded an excellent opportunity of obtaining an accumulation of manure, equal to if not superior to the best commercial fertilizers put upon the market, and yet in many cases this is entirely wasted for the want of saving, or else because for cause is not subject to being saved. In the first case it is from neglect in taking care of and accumulating what can put in condition to be employed upon growing crops, and in the second case it is because no provision is made for saving, by furnishing a proper shelter for fowls, thus affording an opportunity for the accumulation of the droppings. If fowls are left to care for themselves, and are obliged to roost upon trees and at such points as they are able to avail themselves of, their manure is of little practical availability. Now from even a small collection of fowls, with a proper shelter to which they will resort every night to roost, and upon rainy days, with a quantity of dry earth to be sprinkled under the roosts, as occasion requires, to absorb all moisture and at the same time deodorize the building; several barrels of manure can be made of greater value than most frauds of superphosphate. But in addition to this, some farmers will remove the contents of the vault of the water-closet to the hen roost, and there work it over with the accumulations there formed, and by necessary additions of dry earth, an almost inodorous mass is formed, that is many more times more valuable than any other manure that can be made upon the farm. The house slops are another source of valuable elements of fertility, but ordinarily are not properly applied, for the reason that all farmers are not possessed of the conveniences necessary for the distribution of liquid manure. But in such cases a few barrels of dry earth may be conveniently located and by emptying all chamber slops there until the same is fully saturated, a powerful fertilizer is obtained that can be easily applied. But the leakages upon all farms are far too many to be considered in one short article, and the mention of a few may be sufficient to direct the thought of farmers to the consideration of this subject more thoroughly, and to a corresponding saving of fertilizers.

WILLIAM H. YEOMANS

Columbia Connecticut

The *Maryland Farmer* for May, published by E. Whitman, Baltimore, at \$1.50 per annum, is at hand. It abounds with matter that cannot fail to interest farmers.—*Easton Star*.

Live Stock Register.

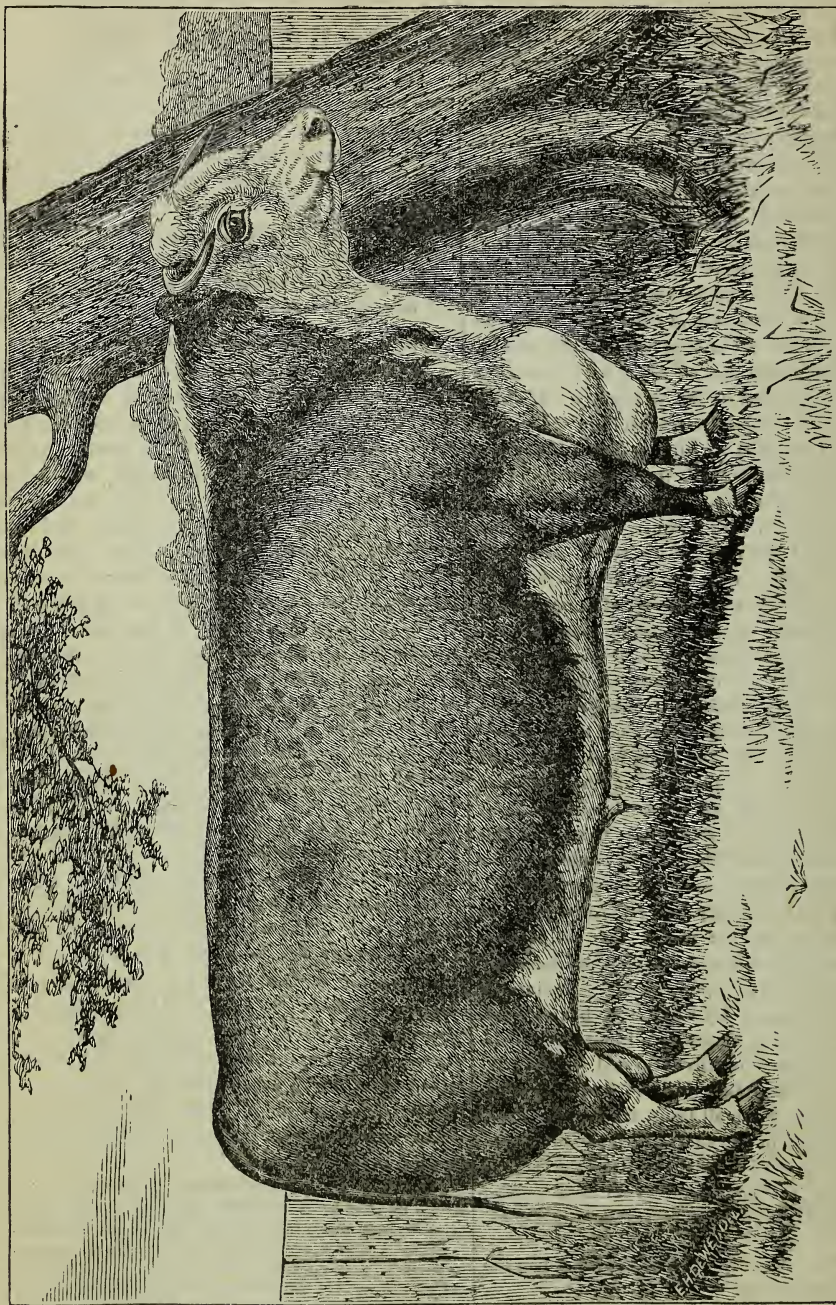
How to Produce Good Milkers.

The method is very simple and may be told in two words—good management. In the production of good cows it is not necessary to ignore blood and good breeding, but it is absolutely important that kind care and judicious treatment be observed in their management. This course will often result in producing superior milkers from such animals as have no royal blood in their veins, while the reverse will make poor milkers out of the best bred cows in the land.

PRODUCING SEX AT WILL

The question of producing sex at will, in animals, seems to be pretty well settled. It appears that science has at last, with analytical research and scrutinizing care, unlocked the door to these mysteries, and laid bare the simple means by which these ends may be accomplished. Prof. Thury, of Geneva, has shown how males and females may be produced in accordance with our wishes. He says: "If you wish to produce females, give the male at the first signs of heat; if you wish males, give him at the end of the heat." The truth of this law has been sustained in practice, and George H. Napheys, A. M., M. D., of Philadelphia, in one of his recent works, says on the subject, that he has now in his possession the certificate of a Swiss stock-grower, son of the President of Swiss Agricultural Society, Canton De Vaud under date of February, 1876, which says "In the first place, on twenty-one successive occasions I desired to have heifers. My cows was of the Schurtz breed, and my bull a pure Durham. I succeeded in these cases. Having bought a pure Durham cow, it was very important for me to have a new bull to supersede the one I had bought at great expense, without leaving to chance the production of a male. So I followed accordingly the prescription of Prof. Thury, and the success has proved once more the truth of the law. I have obtained from my Durham bull six more bulls (Schurtz-Durham cross) for field work, and having, chosen cows of the same color and height, I obtain in what is required at will."

[Our friend Mr. J. Henderson of Baltimore, informs us that he is a faithful believer in this doctrine having often tried it and has in no instance failed—It would be well for our friends to make experiments during the year in this as well as the other theory of Guenon—the Escutcheon—and next year report results to the MARYLAND FARMER—In experimenting as to sexes, the cow should not run in the field with the bull, but be introduced when first in heat, or just going out' as a heifer or bull calf may be desired.



HEREFORD BULL "SUCCESS."

Property of T. L. MILLER, BEECHER, ILL.

We present our readers this month with a cut of the Hereford bull "*Success*," imported by T. L. Miller, of Beecher, Ills., from England in 1873.

This breed of cattle have made such an advance towards public favor in the past five years that promises at an early day to place them above all other breeds for the production of beef in the great West. The opening of the plains makes the opportunity for the Herefords. These plains provide pasturage the year through, subject, however, to some drawbacks, among which are scant herbage requiring considerable travel, and in the winter severe storms, all of which require a hardy animal and a good grazier. These conditions the Herefords more fully meet than any other breed of cattle, coming from these plains at 2 and 3 years old ripe and finished beeves, often selling at top prices, and always above the prices of any other steers from similar range. And with this supply comes the English demand where the Hereford commands the highest market, whether for the block or for grazing. While these conditions are being met by the Herefords at the West, our friend, Mr. John Merryman, has demonstrated at the East, for many years, that they cannot be excelled for the dairy. He has secured a son of "*Success*," which he has placed at the head of his herd; and Mr. Miller has a son of Mr. Merryman's "*Sir Richard*," which he is using upon the heifers—the produce of his "*Success*." It is proper to say that Mr. Merryman has sent several of his "*Sir Richard*'s" West, where they are doing him much credit as beef producers.

Hereford Cattle.

To the Editors of Maryland Farmer—Gents: I take pleasure in forwarding a letter from Dr. W. H. DeCoursey, giving his experience with Hereford's; also beg you will give place to the following extract from a communication received from L. A. Knapp, of Dover, Kansas:

"What are your prices for both sexes, Herefords? They are taking a front seat in Colorado for grading with. I have a herd of 15 head of Short-horns (registered); have been handling them about 9 years; would like to make a start in Herefords. Have received letters from men that breed both, and they give the Herefords the preference."

Very truly yours, JOHN MERRYMAN.

Hayfields, June 6th, 1878.

QUEENSTOWN, QUEEN ANNE'S CO., MD.,

May 22d, 1878.

Hon. John Merryman, Hayfields—Dear Sir: I am glad to see that you have come out in defence of the Herefords against the slurs attempted to

be cast upon them, either by parties interested in crying them down, or of persons whose prejudices will not permit them to be fair judges in the matter.

It is now nearly twenty years since I made my first purchase of a Hereford bull, and my experience in all that time has been of the most favorable character. Since then, I have bred to such animals as Champion, Washington, the Professor, &c., and lately to Richard the III, now on hand. During that period I have sold to breeders in the counties of Cecil, Kent, Queen Annes, Caroline, and Talbot and elsewhere. The reports concerning them are uniformly favorable.

I have also sold each year to butchers of both beeves and veals, at prices beyond those of my neighborhood, and have found the same parties returning to me again in search of more. One of the most intelligent butchers with whom I have dealings declares his experience to be that they generally *net* more than any other class of animals he handles, and he is therefore willing to pay more for fat Hereford cattle than for those of other breeds apparently in the same condition. Not having seen the paper of Doctor Ellsey, Professor of Agriculture in the Agricultural College of Virginia, I do not know upon what grounds he bases his opinion as to the inferiority of Hereford beef, as stated in the *American Farmer*; but if he produces no stronger arguments than those set forth by the Editors of that journal, in their April and May numbers, I scarcely think conviction will be carried to the minds of those desirous of investigating the subject.

Very many reasons might be given why this breed has not made more progress in public favor. It may be admitted that they are not so sightly in figure as the Short-horns, or perhaps so rich in color as the Devons, but when the intrinsic value of the animal in all its relations is considered, these points are of but minor importance. What the farmer (especially in these Middle States) wants is a breed of animals particularly adapted to the surrounding circumstances, where our agriculture is of a mixed character—such a class as can do well and thrive upon the hay and grass that can be spared, where feeding and grazing is not made the special object of the farm, but is combined with the production of grain and other industries—cattle that can stand exposure to occasional storms without material detriment. After experience with both Short-horns and Devons, I abandoned them because they did not seem fitted in most respects for the farmer, as here situated. What he would seem mostly to require is a breed com-

binning the three requisites—of being servicable for the dairy, (where dairying is not the chief object,) excellent for the yoke, and superior for the shambles. As a dairy animal, Herefords may not be as valuable as some other breeds; but with the majority of farmers, the dairy is of incidental value, as supplying the wants of the family, and their ability to do this amply, is testified to by your large experience, as well as that of many others to the same effect.

In the yoke I have found none his superior, even when mated with the Devon, whose excellence is noted in that particular. His value in comparison with other breeds for the shambles, is likely to remain a question of opinion and for discussion. My own experience, confirmed by that of others, proves them to possess remarkably strong and vigorous constitutions. I have never known among them such a tendency to phthisis and other tuberculous diseases as may frequently be seen among Short-horns, nor does their aptitude to take on fat frequently render them barren, as has too often proved the case with many high priced Short-horns. In conclusion I will add that they possess remarkably even and docile tempers. It is rare to find one trespassing beyond his allotted enclosure. There is at first sight a popular prejudice against their white faces, but this is soon overcome when their good qualities become known by experience. Very truly yours,

WM. HENRY DECOURSEY.

[*Note by Eds. of Md. Far.*—Dr. DeCoursey is a gentleman of great experience in stock breeding, and is so far unprejudiced as to try various breeds of our domestic animals to test their relative qualities to ascertain which are best for the farmer's general purposes, both for home use and as a matter of profit in the market. His sheep have had renown in the State—he has had the trial of many breeds. We are thus confirmed by Dr. DeCoursey in our formerly expressed opinion, that the Hereford cattle are the best breed for the farmer to buy with a view to have an improved breed which will give him increased quantity of milk and butter, large fine oxen, and splendid beef, at less cost of food, less attention and poorer accommodation than any other breed of the improved sorts of cattle will furnish. Hence we are forced to conclude they are the American farmer's breed, although we so love the beautiful DEVONS that we say it reluctantly. The rich color of the Devon, with the snowy face of the Hereford, by a cross of the two breed makes an uniform team of superb oxen. The late Col. W. D. Bowie would have no other oxen than a full team of this cross, and he was eminent as a breeder of fine stock.]

Hereford Cattle in England.

Mr. F. Duckham, editor of the Hereford Herd Book, has the following to say about the breed of cattle:

The Hereford is peculiarly a flesh-producing animal, displaying great aptitude to fatten, and unsurpassed for early maturity. The soil of the country, the home of the breed, is not adapted for dairy purposes; thus the general system of calf-rearing is to allow it to run with its dam during the summer months, weaning it when the cow is brought to the straw-yard for the winter. In all well-cared for herds the calf is never allowed to lose the flesh it has thus acquired, but during the winter months it is fed upon hay, roots, and a small allowance of linseed cake. Whether steer or heifer, it pays for a fairly liberal treatment, that it may go out to grass in the spring in fine condition. The steers so managed will at eighteen months realize £1 per month on their age.

The cows, having passed into the straw-yard, are fed upon straw, straw chaff or refuse from threshing, and a few roots, until they calve again. When fat they realize an average of about £30. These averages of value only refer to ordinary judicious treatment, and not to excessive forcing needed for show purposes.

As regards the quantity of stock a farm will carry, much depends upon its quality, but a fairly good farm of four hundred acres, equal parts arable and pasture, will carry twenty breeding cows and their produce up to eighteen months old, and two hundred breeding ewes with their produce to be fed out as yearlings, feeding out the cows and draft ewes. Of course more can be done by resorting to excessive expenditure for artificial feeding; and, on the other hand, less when a judicious expenditure is restricted.

I have received the accompanying interesting letter in reply to inquiries:

"My farm consists of about two hundred acres of light tillage and one hundred and fifty-six of grass, most of which is of poor quality. The stock it has carried for the last few years has been thirty five to thirty-six cows. From one-half to two-thirds of the male produce are kept for bulls, which are sold at from nine months to thirteen months old, the bullocks going off at thirteen months old last year to the butcher. The heifers are drafted at all ages from fourteen months to thirty months, generally to the butcher. The cows go off fat when weaned from their calf, at five years old."—[G. Smythies, Marlow, Leintwardine.

COLIC IN HORSES—An officer who commanded artillery during the late war informs us of the following simple remedy for colic in horses, which he has tried with perfect success in hundreds of cases. Rub the horse well between the fore-legs and around the girth with spirits of turpentine. Immediate relief follows.—*Atlanta Constitution*.

MR. HENRY BERGH evidently seems bent on making himself as ridiculous as possible. Lately he caused the arrest of a servant of Mr. August Belmont, Jr., charging him with cruelty in "docking" a horse's tail. Butler, in his *Hudibras*, speaks of a logician who

"Could distinguish and divide
A hair 'twixt south and southwest side,"

but Mr. Bergh, in thus associating horse hair with philanthropy, has shown himself to be in advance of that eminent scholar. The next thing in order for him to do will be for him to stop the operation of sheep-shearing, even in the face of the generally accepted theory that the wind is tempered to the shorn lamb. The process of docking the caudal appendage of a horse has been practiced for more than a century without any protest from those who might be supposed to know something as to its effects. It can hardly be thought that a man like Mr. Belmont, who has paid so much attention to improving the breed of horses, would do anything towards them which savored of wanton cruelty, and it is to be hoped that he will at once ascertain what the law has to say on the question. Humanitarianism is surely running to seed when it can find nothing better than this on which to expend its sympathy.—*Baltimore American*.

[We agree with the *American* and write Mr. Bergh down as a fanatical ass.]

Showing the necessity of better stock for profitable dairying, statistics prove that if all the milk produced by the cows of Massachusetts was converted into butter and the latter sold at twenty-five cents per pound, each cow would earn thirty-one dollars per annum. Does any one believe that such an average is profitable?

The following quantities of American butter and cheese received at Glasgow during four months ending August 31, shows an encouraging growth of the trade: Tubs of butter in May, 2,800; June, 9,300; July, 21,700; August, 27,200. Boxes cheese, May, 16,000; June, 86,000; July, 53,000; August, 74,000.

THE DAIRY.

Jersey Belle.

This Jersey cow, recently alluded to in the *Journal* as the one for whom her owner had been offered and refused \$5,000, is the finest specimen of the breed of which we have any accredited record. She is five years old. She calved last March, and in ten days thereafter, being tested, it was found that she was making three pounds and two ounces of butter per day. She averaged 20 lbs. per week for three months, and in August last made 18 lbs. per week. She has the following record for 1876: Through March, 19½ lbs. per week; in June 16 lbs. per week; in September, 14 lbs. per week; and in December 1 lb. per day, and due to calve in about two months. Five quarts of her milk made a pound of butter all through the summer, and in December four quarts were only required. Her feed in summer is common pasture, with an addition of two quarts of short at night. In winter she is fed on rowen hay and two quarts of shorts per day. If "beauty is what beauty does" she is well named "Jersey Belle," and no wonder that her owner, Mr. Chas. O. Ellms, of Scituate, Mass., refuses to part with her at any price, proposing to keep her as long as he or she lives.—*National Live Stock Journal*.

Production of Jersey Cows.

My cow "Granny" produced 50 lbs. of butter in December. She gave 845 pounds of milk, and made a pound of butter from 14.32 pounds of milk. She is six years old, and weighs 964 pounds.

"Ida 3d" gave over 6,400 pounds of milk during the year of 1877. She is seven years old, and weighs 922 pounds. She dropped two calves in 1876.

"Panther," four years old last December, gave 5,700 pounds of milk during the year. Previous to January 1, 1878, "Panther" had given milk 811 days, and made over 850 pounds of butter. She has given a total of 11,041 pounds of milk. At two years old she weighed 844 pounds.

The milk given by my cows is weighed and tabulated, night and morning, in the stable where they are regularly milked. It is put into deep cans, which are set in ice-water in summer. In the winter the cows are fed cut roots, mangles, and Swedes, in addition to hay, corn-fodder, and bran.

ST LOUIS, MO.

THOS. ALLEN.

[*Coleman's Rural World*.]

New Facts About Milk.

It has been found by chemical analysis that the evening's milk is richer than the morning's. Professor Boedeker has analyzed the milk of a healthy cow at different periods of the day, and found that the solids of the evening's milk (13 per cent.) exceeded those of the morning's milk (10 per cent.) while the water contained in the fluid was diminished from 89 per cent, to 86 per cent. The fatty matter gradually increases as the day progresses. In the morning it amounts to $2\frac{1}{4}$ per cent., at noon $3\frac{1}{2}$ per cent., and in the evening $5\frac{1}{2}$ per cent. While 16 oz. of morning's milk will yield but $\frac{1}{2}$ oz. of butter, about double the quantity can be obtained from the evening's milk. The caseine is also increased in the evening's milk, from $2\frac{1}{4}$ to $2\frac{1}{2}$ per cent., but the albumen is diminished from 44 per cent to 31 per cent. Sugar is least abundant at midnight ($4\frac{1}{4}$ per cent.) and most plentiful at noon ($4\frac{3}{4}$ per cent.)

HOW TO MAKE COWS GIVE MILK.—A writer in the *Southern Farmer* says:

His cow gives all the milk that is wanted in a family of eight, and that from it, after taking all that is required for other purposes, 260 pounds of butter were made this year. This is in part his treatment of the cow: If you desire to get a large yield of rich milk, give your cow every day water slightly warm and slightly salted, in which bran has been stirred at the rate of one quart to two gallons of water. You will find, if you have not tried this daily practice, that your cow will give twenty-five per cent. more milk immediately under the effects of it, and she will become so attached to the diet as to refuse to drink clear water unless very thirsty. But this mess she will drink almost any time, and ask for more. The amount of this drink necessary is an ordinary water-pailful at a time, morning, noon and night.

What Agriculture Does.

An exchange says: Without agriculture there is no wealth. Gold and silver are not wealth—they are its convenient representatives; commerce produces no wealth—it simply exchanges it; manufacture, and the arts combine it. Agriculture is the prolific mother of wealth—the rest simply handle it when produced and delivered into their hands.

The earth breeds savages. Agriculture breeds enlightened nations; it breeds houses and ships, temples and seminaries; it breeds the manufactory; sculpture, painting and music are its offspring. The wheels of the workshops, the sails of commerce, the implements of science, the pen of genius, the pencil and chisel of the artist, the eloquent tongue of the orator, the scheming brain of the statesman, the equipages of wealth, the ban-

queting of pleasure—all that renders earth in its tides of life anything but a great sepulchre, move and have power of being, because the fields yield the fruits to the patient toil of the husbandman.

We might manage to live without merchants, without mariners, without orators, without poets, perhaps we might possibly survive the loss of demagogues—but sure I am we could not without plowman.

The state of husbandry in any country is the best test of its enlightenment. The thermometer of civilization rises or falls as drives the plow. "You must send the plow," exclaimed a man who had traveled all over Christain missionary ground, "in heathen lands, a barbarian nation needs but to be plowed up deep, subsoiled, planted, and the inevitable harvest will be an enlightened nation."

LARGE SPECIMEN OF OATS.—Mr. J. Joseph Gray, of Elm Farm, a long noted hay farm near Finksburg Station on the Western Maryland R.R. in Carroll County Md., brought us, on the 12th June a stalk of oats, $5\frac{1}{2}$ feet high, and *half an inch in diameter*, with a fine head. It looked more like a stalk of broom corn than it did like oats. The blades were long, and over an inch wide. The whole stool from one grain, had then 185 well developed grains. The yield for the whole field is estimated will be 50 bushels per acre. It had been fertilized in 1876 with Whitman's Missouri Bone Meal, and in '77 manured with stable manure for corn, and the oats this year had nothing. The soil is rotten rock soil, on a clay substratum. The tract of land once abounded in soap stone, iron and copper ores. This farm is one of the finest, and handsomely located that is to be found in the state, and is very productive. The Patapsco runs through it, and on the banks of this river are the famous meadows.

A NEW WINTER-GRASS. Mr. B. B. Snyder of Baltimore City, brought to our office early in June a plant with stalk and leaf like red three leaved clover. It was 2 feet long, and at each joint and on the top, were clusters of three or more small burrs, like minute chesnut burrs, yet the pricks or thorns were soft and yielding. Mr S. calls it California or Burr Clover. It grows in his yard in this city, he obtained it from a gentleman in Georgia, who got it accidentally with some turnip seed from California. It seeds itself and grows all winter, no matter how frozen the earth may be it is green and growing. Domestic animals are very fond of it—grows in a dense mass and over two feet high, ripens its seed first of June, and in Georgia early enough for the crop to be turned under as a green manure, for the cotton crop, and in autumn it comes up, so that after the cotton is picked it furnishes a fine winter pasture for stock. It may prove valuable—we have never seen anything like it, and if it has no bad qualities, of which we are ignorant, it deserves attention of farmers.

OUR LETTER BOX.

Dr. Wood, of Balto. Co., Md., writes us:—"My son, a youth of fifteen, sends this melancholy effusion to you (with my approval).—I have made no corrections or alterations in it, and he must take his chance for its appearance in the FARMER."

For the Maryland Farmer.

Messrs. Editors.—I am the youngest of six sons of a retired naval officer and a farmer, who is a disciplinarian, and having practiced discipline upon my five brothers, now brings his experience down on me—I therefore send you the following:

Lamentation.

Why does he disturb my pleasant dreams,

By roughly shaking the bed?

He spoils all of my fanciful schemes

By laying his hand on my head.

What can he mean by calling me at

This exceedingly early hour?

O! I perceive why this thing must be,

Through the night there has been a shower.

Now oh now! I see why it is

He disturbs my slumbers sweet

He wants me to work in that garden of his,

As he says to earn my meat.

He declares he is short of hands,

And calls me at earliest dawn,

While mother repeatedly gives her commands

To come and clear up the lawn.

How I long for the sun to roll over my head,

While I am weeding and hoeing and reaping,

How I long to be in my large double bed,

Quietly and peacefully sleeping.

Evening has come I perceive by the sun,

Who is now going down in the west;

I gladly and joyfully lay my hoe down,

I am so glad to be rid of the pest.

I go in the house feeling weary and worn,

And lay myself down on the bed,

That part of the day I was not planting corn,

I worked in the garden instead.

As I lay my head down on the pillow.

I have but one thought and one pain,

Which is that the very next morning

I will be up and at it again.

W.

[Thanks master "W." of Rosewood Glen, and hope to hear more from you soon, in regard to the fruits of your reluctant labors—Let your motto be "up and at it again."]

Westminster, Md., June 14th, 1878.

Editors of Md. Farmer—Gentlemen: Will you or some of your friends answer the following questions:

1st. How many hens would be required to lay eggs sufficient to keep running an incubator, with capacity to hatch 300 eggs at a time?

2nd. Probable number of chickens can be hatched and raised during the year, in good quarters built for the purpose?

3d. What kind of chickens would be best suited for the purpose. Young chickens to go to market at 10 weeks of age?

4th. What the estimate cost of feeds for entire lot of chickens, for the year, say young chickens sold always at 10 weeks old, what price could be realized in Baltimore? CHICKS.

HEALING SPRINGS, VA JUNE 10th, 1878,

Editors Maryland Farmer:

Can you or any reader inform me what will destroy Sheep Sorrel in Land? I have heard Lime would.

Respectfully,

L. A. WARREN.

Answered by EDITORS MARYLAND FARMER. It is an old idea that *lime* is a corrective of sorrel or an antidote, and some learned agricultural chemists think land requires lime, when it brings up much sorrel. We have an entirely different opinion. We speak from observation for years and large experience. Sorrell will not grow on what is called and known to be sour-soil, and lime adds to its growth, for we have seen it more vigorous on the bed of a lime kiln and around the spot where a heap or kiln of lime had been buried than any where else in the field. It usually is seen in light, sandy or alluvial soil, of Maryland we speak. The only remedy is, thorough tillage of some hoed crop for two years, followed by oats sown thick with grass seed, and make the land rich. Never allow any to seed on the farm—it is a great pest and not eatable by any stock. To destroy it, fertilize your land highly, keep it in cultivation for two or three years, and in crops that require clean culture and often working.

BLACKBERRY WINE.

Chicago Ill., June 25th 1878.

Messrs. Editors Maryland Farmer:

I venture to send you a recipe for Blackberry Wine, at the risk of incurring the denunciations of the "Dashaways." Pick the fruit in a dry day. Put them in a large tub or half barrel; cover them with boiling water; mash thoroughly with a clean

rammer; cover over and let it remain 24 to 36 hours. Then draw off the liquor by a faucet or strain through a fine sieve, strainer or coarse cloth, into another vessel, adding 3 lbs. of clean brown sugar to each gallon of fluid, when well dissolved and mixed, put it in a keg or barrel; and let it work or ferment for 10 days or more if the fermentation goes on; then bung tight and next winter draw off all that runs clear; bottle or demijohn and it is ready for use, yet it improves greatly from age. M. F.

We hope this excellent lady-housekeeper will continue to send us recipes and that other ladies will do likewise.—EDS. MD. FAR.

THE APIARY.

KENWOOD FRUIT FARM,

Charlottesville, Va., June 8, 1878.

Editors of Maryland Farmer.—In Mr. Paul Viallon's excellent article on "Bees and honey in the South," in the June number of the Farmer, he has made a mistake which I wonder at, as he appears to be so well informed as to recent improvements. He recommends the Langstroth hive very properly, and especially for the reason that that is becoming into more general use. But what is that? The Langstroth hive? Mr. Langstroth was an experimenter all his life and made many forms of frame and hive. After his retirement, a leading bee keeper and writer on the apiary, asked for the best shape and size that he would recommend. Now that was the size adopted, and the one now known almost all over the Union as the Langstroth frame.

The hive may vary in size and form and manner of construction, as it does, for I have eight different styles; yet the Langstroth frame fits all. Some are wide enough for 8 frames, and some for 9. 10x12x20 frames. Of one story and of three stories. That size is given for the frame at 17½x9½ outside measure. This varies slightly in different apiaries, and each one seeks uniformity in his own apiary. Mr. V., while granting the desirability of general uniformity, gives an entirely different size, viz: 13½x11½. Now this size may be a good one, but it is no more a Langstroth frame than a "Singer" sewing machine is a "Domestic." It is a matter of some importance, for it may mislead many who are now for the first time taking an interest in bee culture under the impetus, which success under the new system has given.

It is well that it is so and that bee keeping be extended, for hundreds of pounds of purest nectar go to waste yearly, which might be saved by skillful management.

A leading writer has classified the different sizes of frames with sufficient minuteness, and there is little doubt but that great results have been obtained with each size under skillful management. These sizes are as follows and named after the hives or inventors:

The Quinby,	. . .	18½x11½ inches.
" Langstroth,	. . .	17½x9½ "
" Adair,	. . .	13½x11½ "
" American,	. . .	12 x12 "
" Gallup,	. . .	11½x11½ "

Respectfully, J. W. PORTER.

BEES AND HONEY IN THE SOUTH.

BY PAUL L. VIALLON.

Feeding Bees.

The queen lays more or less according to the quantity of supply gathered by the bees. The honey of the previous year contained in the cells, is consumed only as needed; but does not stimulate the laying of the queen. If we feed every time the bees are not gathering, the laying of the queen will be kept up to its full capacity, according to the strength of the colony, and we shall obtain by this method very strong colonies, whether the season is good or not. If our aim is to have very strong colonies and a good crop of honey, we should begin to feed by the 1st of March; if on the contrary, we wish to *increase* our colonies, the feeding should begin as soon as possible, in this latitude about the latter part of January, so as to have very strong colonies one or two weeks before the last of March.

The best feed is honey thinned down with warm water, say equal parts of each. If we have no honey, a good substitute is a syrup, made by boiling one pound of sugar in one pint of water. The quantity to feed, will depend upon whether we feed for stimulating brood rearing, or to prevent starvation of colonies deprived of stores by our negligence. When we wish to stimulate the queen to lay, we should feed about a half pint every evening, and should keep this up as long as the bees are not getting a natural supply. If we wish to prevent starvation, we may give them about a quarter per week, or more if necessary.

A cheap and good feeder is made by taking a wide-mouthed fruit jar, filling it with the feed and tying a piece of muslin over its mouth. Reverse it right over the frames in a hole cut on the top board, just large enough for the neck of the jar, or still better, reverse it on two small blocks, right at the entrance of the hive, if the weather is not too cold for the bees to come out; but the best and cheapest feeder is made by nailing a piece of thin board 3-16 of an inch thick and 2 or 3 inches wide, and as long as our frame is wide, on both sides of the bottom of one of our frames, thus forming a trough right in the bottom of the frame, in which the feed is given to the bees, by just putting the frame in the center of the brood nest.

I would advise not to feed in the day time, as we may attract robber bees and have trouble. Many Apiarists are under the same impression as I was a few years ago, that it was useless to feed bees, as it did not repay the trouble; but all I can say is that since I have experimented on the feeding of bees early in the spring, I have changed my mind, as those of my colonies which have paid the best and given the largest amount of honey, are those which had been fed a few pounds of honey early in the spring.

I generally feed the bees with honey left in the hive which they have not consumed during the winter, so as to force them to use it for brood-rearing. I extract it as needed, mix it with water, and feed it back gradually; by the time the main clover crop is available, there is no old honey left in the hive to injure the quality of our fine clover honey.

Surplus of Honey in Sections or Boxes.

I came to the conclusion two or three years since, that sections or boxes, with only one comb of honey about five or six inches square, and each box to contain 1 or $1\frac{1}{2}$ pounds of honey, were better for the market than the boxes containing two or more combs. I make my sections with white pine 3-16 of an inch thick. The top and sides of the sections are $1\frac{1}{2}$ inch and the bottom $1\frac{1}{2}$ inches wide;—this $\frac{1}{4}$ inch less in the bottom piece, will, when nailed, allow $\frac{1}{4}$ of an inch on each side, and when the sections are put one against the other on the hive, there will be a passage $\frac{1}{4}$ of an inch wide, for the bees to pass into the sections. As a starter or guide for the bees I use strips of white drone combs or bright comb foundation, cut one inch wide and as long as the section, and stick them with equal parts of melted wax and rosin.

To put the sections on the hive, I make a frame fifteen inches square with $\frac{3}{4}$ of an inch lumber, $1\frac{1}{2}$ inch wide. I nail across the frame three pieces of hoop iron about $\frac{3}{4}$ of an inch

wide, one on each side, to project inside about $\frac{3}{4}$ of an inch and one in the middle, to support the section boxes. (When we have arranged our section boxes into the frame, we place the frame right on top of the hive, after removing the top board and quilt.) Now we place two rows of section boxes into this frame, one against the other, so as to form, when put together, two long boxes, and we put a tin separator between each section. These tin separators are pieces of thin tin cut the length of two sections and just wide enough so as when put between the sections, they will leave a passage of $\frac{1}{4}$ of an inch at the top, and bottom, for the bees to communicate from one section to another. These tin separators will force the bees to build straight in the sections and prevent bulging at the corners—making it an easy matter to put glasses on both sides of the section. Now we put a glass to close the end of these sections and hold the sections in their position with a piece of spring wire, bent in the middle in the form of a ring, to form the spring and bend the ends at right angles so as to catch against the glass at the end of the sections and keep them together. We must use a cover for these sections, made something like a cover of a trunk, which can rest on the edges of the frame holding the sections on top of the hive.

As soon as the bees have started into the sections, we should watch their progress and remove every section as soon as it is full, and replace it by an empty one with a comb guide in its place, and so on as long as the season lasts, thus stimulating the bees and obtaining very fine honey; as if we leave them on, until they are all filled, not only we are apt to check the bees from working into new ones, (as it happens often, that after taking the whole set of sections off at once, it is hard to have them to start in new ones,) but also they may soil the combs and therefore make our comb honey look bad and inferior. I admit that it is a little trouble to do this; but we are largely repaid for it in the quantity and especially in the quality which is not a small item,—and this is my experience.

Now to send our honey to the dealer we must put a glass on both sides of each section. To put glass on we will insert two long glaziers' points through the top piece of the section $\frac{1}{4}$ of an inch from the edge and two shorter points in the middle of the edge of the bottom piece; now we put our glass in, which is exactly the length of the width of the inside of the box and 1-16 of an inch wider than the inside height of the section. The two glaziers' points at the top will prevent the glass from pressing against the honey, and the two below, will prevent it from sliding down, and as the bottom of the glass strikes the edge of the bottom piece of the section; it cannot be pressed against the honey. Now

we fold these points over the glass and it will be fastened; and whenever we wish to take the glass off, we only have to straighten the points. The two points that we put in the top must be long enough to project about $\frac{1}{4}$ of an inch inside of the box, so as to prevent the glass from pressing against the honey and come out at the top about $\frac{1}{2}$ an inch so as to fold over the glass and keep it in its position. We may paste some nice paper over the sections and along the edges of the glass to make them air tight, and it will also give them a nice appearance.

At the end of the honey season, we may have a lot of section boxes which are empty or partly filled—the best thing to do, is to take them off the hives, as otherwise the bees would soil them, and store them away to be used the next season, thus giving it a fine start.

Our Home Journal.

Maryland Horticultural Society.

The June meeting of this society, being the last monthly exhibition for the season, was a brilliant one. The display of foliage plants and plants in bloom was very fine, and there was a very large attendance of visitors. We use the report given in the American.

The largest exhibitor was Mr. R. W. L. Rasin, on whose tables, stretching the width of the room, were croton trees, draecenas, five feet high; a face plant, on which there were hardly two leaves alike in their variegated markings; early Victoria asters and several beautiful ferns, including a new kind of the "maiden hair" variety. Mr. Rasin's garden-er, Wm. Smith, is one of the best in the State. W. W. Spence's collection was rare and interesting, including a pine apple plant, bearing the fruit, and a white hyacinth, three and a half feet high. Cromwell & Congdon had a table of splendid fuchsias, along with several dwarf foliage plants and some fine beds of mimula or "monkey plant," much improved in size and colors on the common stock.

In cut flowers and foliages Wm. D. Brackenridge, of Govanstown, led off with a large table bearing clusters of Japanese maples, purple barberry, black beech and birch, golden spirea, variegated box alder, speckled gout weed, the curious bladder senna, and a beautiful kind of ranunculus known as "Love-in-a-mist." John Cook had a beautiful bouquet of forget-me-nots, with bovardi, as lining the base. The "Clamatis-Jackonianni" shown by John Edward Feast attracted universal attention. Nothing could excel in richness and colors and grace of form those masses of deep purple flowers. The plant is hardy, and no one but

Mr. Feast has it in Baltimore. August Hoen exhibited cherries, umbrella-shaped magnolias, delphiniums, St. Peter's wort, spirea, and a lot of splendid roses. John Saul of Washington, had seventy five varieties of roses, many of them new and rare, some fine gloxinia, dark, rich pelargoniums, and various other fine things. Two new pelargoniums that will prove valuable additions to the family were given two special premiums. Charles L. Kemp, Jr., an amateur, received a special premium for a floral design.

Other persons given premiums were Ernest Hoen, Cromwell & Congdon, J. Edward Feast, James Pentland, W. W. Lawrence and E. Nelson Stevens, for gooseberries; Elizabeth Burroughs, William Fraser, W. D. Brackenridge, Charles I. Lemp, Jr., and Master Robert Rasin, for bouquets; Master William Sands, Master Willie Feast, John George Grane, Mrs. A. K. Sappington, August Hoen, W. H. Perot, John Cook, Miss Lizzie Patterson, Gustave Burger, A. L. Black, Archibald Anderson, Miss L. Martin (of Ellicott City), R. J. Halliday, W. W. Spence, R. W. L. Rasin, Robert Patterson, and \$5 for a stand of field flowers to Miss Juliet Montague.

THE NATIONAL AGRICULTURAL CONGRESS will assemble at New Haven Connecticut on the 27th of August next. A very large attendance is expected, as there will be many important questions for its deliberations and the locality at that session is seductive to denizens of a warmer clime.

Queen Anne's County has organized an Agricultural and Mechanical Society at Centreville. It is the intention to hold annual fairs, and \$3,000 toward the expense of obtaining a suitable location, etc., are already secured.

EARLY HARVEST.—In Talbot County Md., harvest begun the 10th of June.

The *Comet* says: "The oldest inhabitant is too young to remember ever having seen or heard wheat being cut on Whit-Monday, before this year."

The *Leader* says, Twenty-five thousand barrels of shell oysters and three hundred thousand gallons of shucked oysters had been shipped from Crisfield from the first day of September, 1877, to the first day June, 1878.

The annual fair of the Talbot County Agricultural Society will be held at the grounds of the association on Wednesday, Thursday and Friday, September 11, 12 and 13. The fair will be held under much more favorable circumstances than heretofore.

An Olio of Friendly Compliments.

The Maryland Farmer.

The March number of this valuable magazine is on our table. It is one of the oldest and most reliable publications, of its kind, South of Mason & Dixon's line, and contains, each month, useful information that is worth four times its subscription price for the whole year.

The Maryland Farmer is a large, well printed magazine, and is edited with marked ability by Mr. Ezra Whitman, who is ably assisted by Col. W. W. W. Bowie, both of whom are practical farmers, and are thoroughly acquainted with the farming interests of the South. It has a long list of able correspondents in the Middle and Southern States, who are practically engaged in every branch of agriculture, so that all classes, Farmers, Planters, Horticulturists, Florists, and all others engaged in rural pursuits, may rest assured of finding valuable and reliable information in each number, in reference to their several pursuits; while the ladies' department is always filled with instructive and entertaining reading.

We would advise all who wish a first-class Southern Agricultural Magazine, to give the Maryland Farmer a trial.—*Southern Watchman*, Athens, Ga.

The Maryland Farmer.—This popular journal for January contains several interesting articles, literary articles as well as its usual complement of able agricultural treatises. The *Maryland Farmer* is as necessary to the farmer who wishes to carry on the business of the farm in an intelligent manner, as the daily newspaper is to the merchant in our large cities. Every subject of farm life is treated of in a comprehensive manner. The articles, in their language, are neither technical nor too simple. A correspondence in relation to "The Question of Labor in Agricultural Colleges" displays good judgement and no doubt harmonizes with the views of all those who have given this question any consideration.—*The Maryland Farmer* should be taken and preserved by every farmer in the State.—*The Collegian*, Annapolis.

In the Maryland Farmer, Southern Agriculturists have an able journal devoting a large space to their exclusive interests. It is a monthly, printed on good paper with clear type, and always replete with timely topics. A sample copy will give one a clear idea of the scope of the Farmer, and we recommend interested readers to send for one.—*Rural New Yorker*.

THE MARYLAND FARMER.—We have also received the *Maryland Farmer*, the various departments of which are filled with excellent reading matter for farmers and their families. Published by Ezra Whitman, No. 141 W. Pratt St., Baltimore. Col. W. W. W. Bowie, editor. Terms \$1.50 a year.—*Egis and Intelligencer*, Belair, Md.

The *Maryland Farmer* is one of the ablest of the agricultural periodicals. Published by Ezra Whitman, of Baltimore.—*Balto. Gazette*.

Maryland Farmer.

As usual, it is filled with a great variety of useful and instructive matter for the farmer. Our genial friend and correspondent, Col. W. W. W. Bowie, is now conducting editor, and under his management, the *Farmer* loses none of the vim of former days. He does not forget his usual sprightly chat with his lady-readers. It is published by Ezra Whitman, No. 141 W. Pratt Street, Baltimore, at the low price of \$1.50 per annum. Now is a good time to subscribe.—*Prince Georgian*.

MARYLAND FARMER.—The May number of the above named popular farm magazine has come to hand, and, as usual, is well filled with excellent articles on very important subjects of interest to the farming community. It is useless for us to commend it, as it has already established for itself a reputation second to none among the farmers of Maryland. Published by E. Whitman, Baltimore, Md. Price \$1.50 per annum in advance.—*Fredk. Examiner*.

We have received the April number of that excellent farm journal, the *Maryland Farmer*. It is embellished with an excellent picture of the Maryland Agricultural College, and it contains as well a succinct history of this institution from the pen of Prof. WARFIELD. It contains many useful hints for farmers. Its Associate Editor, the genial "Patuxent Planter," was in our village last week looking hale and hearty. May his "Chats with the Ladies" never grow less.—*Marlboro Gazette*.

The *Maryland Farmer* comes this week laden with good things, among which appears a communication from "Wicomico," who gives the best description of the late fair held by the Wicomico Agricultural and Mechanical Association we have yet seen, and it is true to the letter. See *Maryland Farmer* for December.—*Salisbury Advertiser*.

The Maryland Farmer.

The Md. *Farmer* for March has been received, and has been found to be an unusually interesting number, the present issue containing a great variety of valuable reading matter, which cannot fail to prove of interest and profit to the large class for whom it caters.—*St. Mary's*, Beacon, Md.

The *Maryland Farmer*, 1878, is full of interesting agricultural, horticultural and miscellaneous information. The articles devoted to live stock the poultry house, the apiary and the dairy are valuable. The ladies department is worthy of attention.—*Transcript*, Chestertown;

THE
MARYLAND FARMER,
A STANDARD MAGAZINE.

DEVOTED TO

Agriculture, Horticulture & Rural Economy.
EZRA WHITMAN,
Editor.

COL. W. W. W. BOWIE, Associate Editor.

141 West Pratt Street
BALTIMORE.

BALTIMORE JULY 1, 1878.

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CLUB SUBSCRIPTIONS—Any one who chooses to get up a club of ten, and sending us *ten dollars* will have a copy gratis.

In clubs of five or more, \$1.00 each; and names may still be added to the clubs already made up at the same price.

FARMERS! WRITE FOR THIS, YOUR SPECIAL JOURNAL, AND INTERCHANGE VIEWS WITH YOUR FELLOW FARMERS.

Our friends can do us a good turn by mentioning the MARYLAND FARMER to their neighbors and suggesting to them to subscribe for it.

TO POSTMASTERS—You will see that the subscription price of the MARYLAND FARMER is \$1.50 per year; but you will be allowed a commission of 50 cents on each subscriber that you will send us; that is, send us \$1.00 and keep 50 cents on each.

Now is the time to *subscribe* and *advertise*, when one half the year has gone, and we enter upon the last six months of the year; and we shall send out a great many specimen numbers of our Journal to different sections of the country, that everybody may see it, and we hope, may appreciate its merits.

FIFTEENTH VOLUME OF
THE MARYLAND FARMER

This is the seventh number of the 15th volume of THE MARYLAND FARMER; and we claim it has been published longer continuously, without cessation, by the same publisher, than any other farmer's journal in this or other States south of Philadelphia.

A popular magazine,—as attested by our subscription list, frequent kind letters from parties, and the notices of our brethren of the press in this and other Southern States,—and is also a *great advertising medium*, as shown by the numerous new advertisements in the present number.

During the present year, we shall allow nothing to prevent our making it superior to all former issues, and maintain beyond dispute its high character.

Its aim will be to admit nothing in its columns like Theory, unless based on science controlled by reason; nor anything called Practical, unless proved by successful experiments.

If our old subscribers will do us the favor to canvas for THE MARYLAND FARMER, by showing it to their neighbors and soliciting the subscriptions, they will confer a great favor on us, and we do not doubt, confer a greater profit on the new subscriber.

MAKE UP CLUBS.

To Clubs of five or more, with pay in advance, we will supply THE MARYLAND FARMER at \$1.00 each, per year.

Those who will send us \$2.50, during this month, shall receive two copies for the year.

Any one who will send us six dollars for six subscribers, shall receive a seventh copy for getting up the club.

These terms enable persons to get the Magazine at \$1.00 per year, postage paid.

YOUNG MEN!

It is an easy way to make money by getting subscribers for THE MARYLAND FARMER. Send 15 cents for Specimen Copies, and ascertain what Liberal Commissions we will allow.

ADVERTISERS.—While we are gratified to perceive from the large number of advertisements in the MARYLAND FARMER—increased monthly—that our journal is appreciated as a profitable medium, yet we are surprised that Farmers who have stock of all kinds for sale do not advertise more freely; merchants properly estimate the value of advertisements, while farmers lose hundreds of dollars by not doing as the merchants do. We have daily enquiries where poultry, eggs, sheep, cattle, horses, &c. are to be had, and at what price. We can not answer in all cases. It is true we have an agency ourselves for the purchase of such articles, but we would have our patrons deal personally with the owners, who advertise.

A SUGGESTION.

There are a few delinquents on our subscription list whom we would remind that "small favors are thankfully received" at this office, and with whom we are loth to part company. The publication of the FAREER is attended with a heavy outlay of cash for paper, labor and other expenses incident to the publication of a magazine of the magnitude of the MARYLAND FARMER. Our subscription is but \$1.50 to single subscribers and only \$1 to members of clubs, per annum, being one of the cheapest, and at the same time best journals of its character in the country. At an increased outlay it has steadily improved in contents and appearance. To those indebted to us, we would say, that an early remittance would be thankfully and duly appreciated.

ATTENTION! SUBSCRIBERS!

In response to our call last month on our old subscribers for the respective amounts due, we are happy to acknowledge a ready response on the part of many and to all of whom we acknowledge our gratitude, and hope that we shall be able to return thanks in our next number to the balance of those who have not yet been able to remit, as the amount due by each individual is small, but when aggregated, are large to us, we do trust those who are still in arrears will make an effort to settle their bills promptly, when we assure them that we pay cash for every expense, great or small, attendant upon each issue of the Magazine,—the cash system is now the order of the day.

GEORGIA FRUITS.—The Weekly News of Griffin, Ga., says: A Macon gentleman a few weeks ago made a large shipment North of early Peaches which he sold at the fabulous price of thirty-six dollars per bushel,

Other fruit growers in this section have realized fifteen, twenty and twenty-five dollars per bushel. These are unusual figures on which it would not be reasonable to predicate even the earliest market prices, but a good market can always be relied on. There's money in it, and a little attention directed that way would pay.

We have received a letter from a Georgia fruit grower, but too late for this number of the Maryland Farmer. Our Southern friends will soon have an Eldorado if they grow fruits and Vegetables for the early Northern markets, and raise their own grain, pork and wool, for home consumption.

A GOOD EXAMPLE.

The subjoined reminiscence of the past, we found, while looking over the 4th volume of the 'Farmer and Gardener', Baltimore, Md., edited by E. P. Roberts. The "Farmer and Gardener," by the way, was started in May 1834, as the "successor of the late American Farmer." It will be recollected that the old American Farmer was established by John S. Skinner and published many years, and then was discontinued. The Farmer and Gardener in a pithy editorial, Nov, 1837 says:

"Some few weeks ago we saw a paragraph stating that Col. Wade Hampton, of South Carolina, to save the trouble of filing yearly receipts, had enclosed to the editors of the New York Spirit of the Times, a draft for \$500, being the subscription for fifty years in advance. This latter instance of liberality, in the generous South Carolinian, must have warmed the bosoms of the editors who were the recipients of it, with a corresponding glow of gratitude. We say gratitude, because we always are impressed with that holy feeling when our subscribers comply simply with the terms of our paper, which are payment in advance yearly."

The above was written in 1837, and we respond Amen! in 1878. EDS. MD. FAR.

Agricultural Implements for the East Indies.

As some indication of the increasing demand by foreign lands for American machinery, it may be stated that the large and enterprising agricultural implement house of Messrs. E. Whitman, Sons & Co., 141 and 143 W. Pratt Street, Baltimore, have just shipped to London, England, in fulfillment of a large order from there, wagons, drills, seed-sowers, ox-yokes, plows, cradles, castings, wagon harness, etc. These implements and goods, it is understood, are destined for the East Indies.

MARYLAND AGRICULTURAL COLLEGE.—The board of trustees of the Maryland Agricultural College met at the college Wednesday, June 5. Present, Hon. John Merryman, Prof. Newell, Mr. Ezra Whitman, Mr. Allen Dodge and Mr. Carroll Goldsborough. The president's quarterly report was read and approved. An interesting, and minutely detailed report of the management of the farm by the farm superintendent was also submitted. The resignation of Colonel T. M. Jones, professor of agriculture, was read and accepted. The committee on the farm spent the day in observation of the farm and crops with much satisfaction,

The History of the Maryland State Agricultural and Mechanical Association.

It is profitable at all times to recall past events, and among others, refresh our memories regarding the past history of public institutions still existing or which have existed. From the experiences of the past we may learn lessons of wisdom for our guidance in the present.

Deeming the history, and a review of some its work, of the Maryland Agricultural Society would be agreeable to the few surviving members of that Society in its early days: acceptable to the descendants of those who formed that organization, and both interesting and profitable to all classes of our readers, we have determined to compile a brief memoir of it, and as far as we can get the facts and our own recollection serves, give a condensed statement of its transactions.

About the year 1840 to 1845, there were several county agricultural societies flourishing in greater or less degree in the State. The Society of Prince George's in 1845 was at its acme of popularity and usefulness,—and ranked perhaps above any other similar association in Maryland or in the entire South.

Seeing the great interest manifested in such societies, proofs of their usefulness in advancing agriculture, horticulture, improving breeds of stock, and other branches of rural industries, some prominent gentlemen of Baltimore County and City, formed a "Maryland Farmer's Club," under a call in the public papers, "to organize a Society in Baltimore, under the above title, to be composed of active members, land-owners within the limits of Baltimore Co.—and of corresponding honorary members, land-owners and agricultural writers residing in the several counties of Maryland, other than Baltimore, and also of such persons as are distinguished either for their labors or writings in the cause of Agriculture, in the other States and in Europe."

In response to this call, a meeting was held Nov. 8th, 1845, at the office basement residence of John Glenn Esq.—afterwards Judge of the U. S. Circuit Court for Maryland—when Dr. Price was called to the chair and Daniel Bowly made secretary. Mr. Bowly made a lucid statement of the objects had in view and enlarged eloquently upon the then state of Agriculture, advocating improved agriculture upon a small farm in opposition to a large barren waste, cultivated carelessly and without system, science, skill or effort to prevent the constant deterioration of the fertility of the soil—John Glenn was elected President, and the permanent officers were appointed at the next

meeting at the same place on the 15th, Nov. 1845. This meeting was slimly attended, yet it reflected large interests in the persons of several who were present. We remember E. Whitman was the only agricultural implement manufacturer present, and Loyd Rogers, then owner of what is now the magnificent Druid Hill Park, was also present, and was enthusiastic in discussing matters relating to corn—its cultivation, marketing—its uses, value, &c.

The subjects discussed, essays read and the general interchanges of views between scientists and distinguished cultivators of land, at the monthly meetings of this Club were highly valuable and calculated to stimulate the growing interest in the improvement of farming, and enlighten the planners and farmers upon all subjects connected with their employment.

We have commenced with this famous Club because it was the real mother to whom the State Agricultural Society we think, owes its birth—Enterprising gentlemen from all parts of the State, met at this club and from these frequent contacts, the subject of a State Society became a matter of discussion and its propriety was manifest, hence a convention of farmers from all parts of the State was called through the *American Farmer*, to meet on the 15th September, 1848, at the hall of the Maryland Institute, for the promotion of the mechanic arts, in Baltimore. A large number of delegates then and there assembled. The convention was called to order by Charles B. Calvert, Esq., of Prince George's County, on whose motion John Glenn, Esq., of Baltimore City, President of the Maryland Farmer's Club, was called to the chair, and Samuel Sands appointed Secretary. Mr. Glenn explained the object of the convention to be—to co-operate with the Maryland Institute in making arrangements for holding a Cattle Show and Agricultural Exhibition, in the city of Baltimore, on the 9th and 10th of November, next in connection with the Mechanics' Fair, to be held at the same time—and likewise to consider such other subjects as might be deemed of interest to the agricultural community.

Hon. John S. Skinner was invited to occupy a seat as a member of the convention, and acknowledged the courtesy in a speech, in which he deprecated the little attention which had been given to the true interests of agriculturists, and as a proof, he stated that the Standing Committee on Agriculture had not held a meeting during the whole past session of Congress.

Judge Chambers, invited the convention to look at and examine Obed Hussey's just-invented ma-

chine for drilling wheat, then on its way for exhibition in Delaware.

Resolutions were submitted and discussed on the subject of guano, by Messrs. Farquhar, Skinner, Capron, Calvert, Glenn and Davis. Guano had but lately been imported and used as a fertilizer for wheat. Mr. Davis stated that 30 years ago a few barrels had been brought to this section of country, but it was not brought into notice, because farmers did not know how to use it. But he said, last year, (1847,) it had been used in Montgomery County alone, to the amount of \$15,000.

After sundry resolutions were passed or offered, and opinions expressed upon matters of general concern to the advancement of agriculture, looking to the increased prosperity of the tillers of the soil, George W. Dobbin, Esq.,—now the venerable judge of the Superior Court of Baltimore—moved that a State Agricultural Society be then formed. And he further moved that a committee of three be selected to report a Constitution and By-Laws. This committee consisted of Messrs. Dobbin, Calvert and McHenry.

At the evening session Mr. Dobbin reported a Constitution and By-Laws, which were adopted. The following officers were thereupon elected :

PRESIDENT.

CHARLES B. CALVERT, of Prince George's Co.

VICE-PRESIDENTS.

Baltimore City—JOHN GLENN,
St. Mary's County—H. G. S. KEY,
Charles County—J. G. CHAPMAN,
Prince George's—HORACE CAPRON,
Calvert—GEORGE WEEMS,
Anne Arundel—WM. C. LYLES,
Howard District—DR. ALLAN THOMAS,
Montgomery—A. BOWIE DAVIS,
Frederick—DAVID W. NAIL,
Washington—WM. DODGE,
Alleghany—DR. SAMUEL P. SMITH,
Carroll—GEO. PATTERSON,
Baltimore—WILSON M. CAREY,
Harford—RAMSEY MCHENRY,
Cecil—REV. JAS. MCINTYRE,
Kent—WM. S. CONSTABLE,
Queen Anne's—JAS. T. EARLE,
Talbot—SAM'L HAMBLETON,
Caroline—JOS. PEARSON,
Dorchester—DR. JOS. E. MUSE,
Somerset—DR. WM. WILLIAMS,
Worcester—JOHN U. DENNIS,
District of Columbia—JOSEPH H. BRADLEY,

Cor. Secretary, GEO. W. DOBBIN,
Rec. Secretary, SAMUEL SANDS,
Treasurer, GEORGE M. GILL, } Baltimore.

Curators.—W. W. BOWIE, of Prince George's; N. B. WORTHINGTON, of Anne Arundel; J. CARROLL WALSH, of Harford; Z. BARNUM, of Baltimore city; CHAS. R. HOWARD, of Baltimore co.

Executive Committee of District of Columbia.—Thos Blagden, John A. Smith, Joshua Pierce, George W. Riggs, Henry Naylor.

The convention then adjourned, and the Maryland State Agricultural Society was organized. The President made appropriate remarks on assuming the duties of his office, and after some minor business was disposed of, the chair announced the following committees, in accordance with the resolutions of the Society and the by-laws :

On Manures.—Wm. Baer, of Carroll, H. Capron, of P. George's, G. W. Dobbin, of Howard District, Dr. J. O. Wharton, of Washington Co., and R. T. Goldsborough, of Dorchester.

On Inspections.—Col. Wm. D. Bowie, of P. Geo's; R. H. Hall, of Baltimore; and N. B. Worthington, of Anne Arundel.

On Fencing.—Messrs. G. W. Dobbin, Robert Dick, of Montgomery; and C. Coleman, of Frederick.

On Sheep.—Col. N. Goldsborough, J. Glenn, Esq., and Col. Charles Carroll.

On Agricultural Implements.—Messrs. J. H. B. Latrobe, M. Tilghman Goldsborough, of Talbot, and Wm. G. Thomas, of Baltimore.

On Farm Buildings.—Messrs. Geo. M. Gill, of Baltimore, J. Carroll Walsh, of Harford, and Gen. T. Tilghman, of Talbot.

On motion of Mr. Dobbin, it was resolved, that a committee on insects injurious to husbandry be appointed in addition to the other committees already provided for.

The chair appointed Dr. Joseph E. Muse, Wm. H. Farquhar, and Dr. Higgins.

The duties of these several committees were to collect as much information as possible on the various subjects submitted to them, and to report to the Secretary on or before the first of November, that those reports might be laid before the Society at the stated meeting on the 8th of November. The Society then adjourned to meet on the evening of 8th November.

The Society met in the evening of the 8th of November, 1848, agreeably to adjournment, at the hall of the Maryland Institute. Among other proceedings, we find Mr. Dobbin, from the Committee on Fencing, made a lucid and satisfactory report on fencing and the law of trespass of stock. The legal principles laid down in that report, which had been before so misunderstood by farmers, have since been recognized by our courts, and that re-

port may be looked upon as the able legal opinion to which all agreed and which has ever since been looked to as conclusive in the settlement of many troubles between neighbors as to stock trespass, without going to the courts. On the 9th the Exhibition opened with glorious weather at Fairmount, in the eastern section of the city of Baltimore. Fairmount is a lofty eminence which overlooks both the city of Baltimore and the Bay. We remember the enlivening scene—the crowd of people—the stock and varied attractions concomitant to a fine Agricultural Fair. It gave new life to the agriculture of Maryland. This fair was a grand success.

One feature of the management of this Society is a marked one, though abandoned for years, should be revived by the existing Society in this and other States. It was this: A committee of competent, disinterested gentlemen was appointed to make a general report of all the transactions of the annual Exhibition. From that report we make some extracts, and obtain some facts from other reports that were submitted, which will in a nutshell, give a comprehensive realization of all matters worthy of remembrance.

Mr. James T. Earle, late State Senator from Queen Anne's Co., made a sensible, yet facetiously witty report on sheep, in which the pen of *select* ewes of Mr. J. M. Turner, a fun-loving genial gentleman, and that day the fashionable sheep-butcher of Baltimore, was particularly alluded to. These sheep were 16 years old and bearing fleeces of two years old. The object of their introduction was to show the age to which these animals will attain, and that other breeds other than Merino will carry their fleece longer than a year.

Mr. E. P. Roberts, of the Committee to make the General Report, says: "The three herds of Messrs. Charles B. Calvert, Horace Capron, and George Patterson, would have alone conferred distinction upon the collection and entitled it to pre-eminence; for the Union does not contain three others combining more excellence in every point which imparts value to the thorough bred Durhams and Devons. In the herds of the two first named gentlemen, however, there were also to be found the *milk-giving* Holstein and the *cream-secreting* Alderney. Mr. Ramsey McHenry, of Harford, had also a splendid herd of Ayrshire, which were universally admired. Besides these, we must notice the Holstein bull of Wm. B. Dobbin, Esq., which elicited much admiration."

The collection of horses was not as large as expected, though there were some notable specimens of horses, mules and Jacks.

The collection of sheep was fine. Mr. Reybold, of Delaware, showed some splendid Oxfordshires—giants in size and superior in form. One weighed 360 lbs.

The display of Cotswolds by Col. Ware, was very fine, and added much to the interest of the Exhibition. Some of them were just from ship-board having been imported by him from England. We are happy to say our venerable friend and correspondent—Col. Ware—is still healthy and hale, and as genial and beloved as any accomplished gentleman that ever trod the soil of the Old Dominion. Other breeds were presented by Messrs. Jessup, Carroll, Duckett, Capron, Horsey, Goldsborough, and Mr. A. Clement, of Philadelphia.

"The floral display by Mr. John Feast was as beautiful as it was tasteful." Mr. F., is still, we are happy to say, living and enthusiastic about flowers as ever. He may with truth be styled the Patriarch of American Florists.

"The collection of AGRICULTURAL IMPLEMENTS were truly magnificent, embracing every variety of labor-saving machinery calculated to promote the interest and the economy of the farm and plantation, and we feel certain that we hazard nothing in asserting, that they have not been excelled, if equalled at any other exhibition during the fall."

There was a vast amount of machinery and a great number of exhibitors. Among the number was Obed Hussey with his seed drills; George Page with newly invented plows, cob and corn crusher, &c. R. Sinclair made a very imposing show. E. Whitman, who is now a veteran in that line, made a very large display, for which he received the 1st Premium for the best and largest collection; he had erected a fine showy building 56 by 22 feet for his *smaller* articles; and had a line of shafting, pulleys and belts, propelled by one of his Horse Powers on exhibition, which gave his whole department quite an animating business appearance. He exhibited a great variety of farm machinery, tools, implements, &c., among which were 70 plows of every variety of shape and pattern, garden utensils, household contrivances, &c. Among the new things was a McCormick's Reaper, and a Pitt's Corn and Cob Crusher; but the chief among his attractive display was his newly introduced wrought-iron railway horse powers, and thrashers—one to thrash only—one to thrash and carry off the straw—and one that thrashed, *carried off the straw and cleaned at one operation*. This was something entirely new and attracted great attention. His building for the exhibit of the machinery at work with shafting, belts, &c., making a regular machine shop and farm-barn in one as it were,

was the first building of the sort ever erected in this country on such an occasion, and has been patterned after ever since by enterprising manufacturers at the great fairs in this country, to enable them fully to illustrate the practical working of the different labor-saving machinery offered to the farmers. Every farmer can thus see for himself how the various machines are managed and how they work, and then judge for himself. He sees, comprehends and feels that if he buys, "he is not buying a pig in a bag."

This first Exhibition closed with hosannas to the successful efforts of the indefatigable President and his officers, and to the praiseworthy efforts and public spirit of all the exhibitors. Mr. Calvert was re-elected President, as were also all the other officers who did not ask to be released.

It was at this fair that the silver premiums were to be handed over to the respective successful competitors for the 1st, 2d and 3d best Essays on the "Renovation of worn-out land," offered by the proprietor of the *American Farmer*. The 1st premium was awarded to Edward Stabler, of Montgomery county, and the 2d to Horace Capron, of Prince George's county and the 3rd to Thomas P. Stabler, of Montgomery county. These Essays called forth much criticism and attention, and no doubt were of vast importance indirectly in promoting the great object sought to be obtained, viz: Improvement of worn-out lands and general improvement of agriculture.

HORTICULTURE.

A GARDEN.

Every man, however limited his means, should contrive to have and cultivate a garden. There are three strong reasons for it:

1. Working in a garden is highly conducive to health. The exercise is gentle; it is united with amusement, and by it both the body and the spirits are invigorated. There is something in the odor of the earth that strengthens the whole system. Let the sedentary man take up the pruning knife and spend an hour of the dewy morning amongst his vines, or the spade, hoe, or rake and prepare or work over his asparagus, lettuce or radish beds, and he will thus give tone and vigor to his body and his mind for the severe studies of his desk. The teacher will teach all the better; the minister will preach all the better for the mind exercise which the garden gives.

For this natural employment of the bones and muscles of the system an hour or two's practice in the gymnasium is but a miserable substitute, since the health imparting exhalations from the ground, as well as the interest and variety, are wanting.

2. The garden is a teacher. There Nature is ever at work, producing her most beautiful forms

and transformations. No man can witness attentively the germination of the seed, the upraising of the blade, the unfolding of the flower, the maturing of the fruit, without at the same time becoming wiser, nobler, better.

The vegetable, the mineral kingdoms here meet and work together. To the curious every step in this working offers something fresh for meditation. Why, for instance, does the plumula ascend? Why does it incline toward the sun? Why does it assume this or that tint? Why does the sap arise in it? Why does this plant take to this kind of nutriment, another to that? Why is a thorn given to this vegetable, an acrid juice to this and honey to that? Why does the dandelion shoot forth in the spring and the aster in the autumn? Why is this leaf orbicular, this heart-shaped, this finger-shaped, this needle shaped? Why is this plant medicinal, this poisonous? Why is this flower fragrant, this scentless? And a thousand other curious questions constantly arise to awaken thought and to turn it to the affluence of the inventive power of the Creator.

The garden, therefore, teaches and in teaching elevates the mind. For this reason, it may be, the created first man and woman were made in paradise; that is, in a garden.

3. The garden is a source of profit. I have known a man who realized as much from what he sold from his garden of one-half acre, as his hard-working brother did from what he sold from his farm of more than one hundred acres.

It is said that a man consumes about sixteen hundred pounds of food per annum. How much of this could and should come from the garden?

"I can buy my vegetables," say one standing by, and who calls in the doctor frequently, "cheaper than I can raise them."

Not so, indeed, I answer, if you take into account the health and instruction imparted by the garden.

Then it is so delightful to see your own lettuce, radishes, tomatoes, melons, peas, beans and sweet corn growing. It is so pleasant to go out and pick with your own hands your own currants, grapes, pears and peaches. And what if you happen to raise a few such things to give away to your poor neighbor? Does it not all come in for profit?

A garden then promotes your health, imparts instruction and greatly helps to sustain your table. It helps other people also. Some things you can afford to do without, but I see not how you can live a really happy life without a garden. Do you?
—*Cor. Ger. Telegraph.*

Large Potatoes for Seed.

In the *Journal* of the Royal Agricultural Society of New South Wales, is the following experiment relating to the difference in yield from the sets of large and of small potatoes planted: "In the month of September, a relative of mine (who was at the time commanding one of the regular traders to this port) gave me a small quantity of a very fine potato, which he had brought from England. I selected two of the finest, which weighed

one pound two ounces, and these were cut up so as to make thirteen sets. In a row next to them I planted a similar number, cut from the same weight of these potatoes, but all small in size; in fact, such as are usually used as seed potatoes. On January 7 I dug up the crop, and found that the two large potatoes produced nine pounds twelve ounces, while the product of the smaller seed was only six pounds. But the most remarkable part of the experiment was that amongst the produce of the large seed there was hardly a small potato, while the produce of the smaller consisted of a great many small tubers, and scarcely any large. If a calculation be made on this basis, it will be seen that one cwt. of large potatoes would produce over six cwt. of a salable crop, while the same weight of small seed will produce only four cwt. of a crop, a large proportion of which would be only of use as pig's food.

Curing Clover Hay.

My plan is to start the mower at two or three o'clock in the afternoon, after all water has evaporated, and the heat of the day is past. Rain or dew will make clover hay black if it is cured before it (the rain or dew) falls upon it. By cutting in the after-part of the day the clover does not cure enough to damage, and as dew is only on the top of the hay it soon dries off. Clover don't want much sun; if it gets too much the leaves rattle off, and you have stems. By ten o'clock start the rake, and by two or three o'clock set the men to putting it up into cocks. Don't let it stand two or three days, but turn it out the next day if the weather is good, and haul it in. It only wants to remain in the cock long enough to get hot, and when it is opened and aired it is ready to be housed. Apply a little salt while unloading, say sow as you would grain, about twice over the stack or mow, while the load is being taken off. Don't get worried if it heats some after it is put away; it will come out bright and sweet in the spring. Stock prefer well cured clover hay to the best gilt-edged timothy, and it ought to be the best judge in such matters. Poor clover is the worst of feed. The great secret in making good clover hay is to keep it free from moisture except its own—while mold don't damage it much.—*Correspondent Rural Sun.*

FRUIT DRYER.

It has been a long time since, I troubled you with my cogitations, as my nursery and business, &c., have occupied me very closely; but I have read the Rural all the time very profitably and

agreeably. I see a friend in Shelby county Tenn. wants to know of a cheap dryer for green fruit. I use one of my own make, and at the risk of being laughed at by the scientific and stylish, I will give it, being satisfied that it will be of some use, as it is for a kind of sun drying both as to quality and time. It is composed of three things. A hoghead, a fruit tree shipping box and a small stove. The hoghead stands on end and has a door sawed out of the side to admit the stove, a hole eighteen inches square is sawed in the head to let the heat of the stove up, and a 6 or 7-foot fruit tree box (such as you ship a thousand lbs. of fruit in) is stood on end on top of the hoghead, having the lower end knocked out, and being fitted carefully over the hole in the head of the hoghead. The heat will thus ascend from the stove through the top of the hoghead, and on up through the long box. A

The Pecan Tree.

Flourishes in the Gulf States and, if properly cultivated, can be made a source of considerable revenue. We know of several pecan orchards not far from this city which yield their fortunate possessors handsome returns for a little time and labor devoted to their care.

A pecan tree is as hardy as an oak and can be grown where any "hard wood" growth abounds. Select for planting, the largest obtainable nuts from the thin shelled variety, as these are more valuable, in any market, than the thick, hard shelled kind. At two or three years of age transplant to the place where the tree is to grow and prune so as to obtain a lateral spread of branches rather than extreme height, which is always an objectionable feature in the tree. To accomplish this purpose, the trees should be planted forty or fifty feet apart, each way, cultivating between the rows with garden truck or by growing peach, fig or pear trees till the entire space is needed for the pecan, when they can be cut out.

A pecan tree, under favorable circumstances, will begin bearing at ten years from the seed. At fifteen years it will pay its owner considerable annual profit. At twenty years it may be considered in full bearing. It will continue to do so for generations, there being no known limit to its capacities in this direction. It lives to a very great age.

The pecan is valuable for it woods and timber as well as its fruit. It is equal in value to hickory for farm use, and can be used for the same purpose. It is an ornamental tree and a grove upon a plantation adds largely to its pecuniary value. Its culture should be extended, especially in localities,

where timber for agricultural uses is not easily obtained.

The above is taken from that excellent paper "Our Rural Home," and we are reminded by it, that the Pecan Tree will stand our Maryland climate. It is a beautiful shade tree and bears after it gets age, but the nuts are not as nice quite as those in the South. We had one which bore nuts, when we lived at Eglinton, near the Patuxent river in Prince George's County, and there is a large one at Bel Air which produces yearly.

BUDDING ROSES.—Amateurs may successfully bud roses, with a little pains and produce fine effects, especially with hybrid perpetuals. A good sharp penknife and the handle of a toothbrush ground thin and smooth, for a spud, are all the implements required. The operation may be performed from the middle of June till September. Select a smooth, vigorous stalk of the same year's growth, or a later growth of last season, and cut carefully across the bark through to the wood, but not into it, one-third or half way round the stalk. Then cut a slit downward from the middle of the cross, cut about an inch, thus forming a T. Cut the bud off at one smooth stroke, cutting close to the stalk, and raising the bark on each side of the perpendicular slit, very carefully with the spud, insert the bud. Bind the bark firmly with narrow strips of cloth or woollen yarn, leaving only the point of the bud exposed. Then bind on a handful of moss, taking care not to cover the point or the bud, and keep the moss damp. Allow no other shoots to grow on the budded branch until the bud becomes set which will be in about six weeks, when the wrapping can be removed. By selecting several buds of different varieties, roses of different colors can be grown from the same stalk. The budded plant must be kept in healthy and vigorous growth. The same process with tea and other ever-blooming roses requires more care and experience to produce the best results.—*Exchange.*

HON. WILLIAM KIMMEL of Maryland, will please accept our thanks for a copy of his able and eloquent speech in "*opposition to the Standing Army*," delivered in the House of Representatives 20th, May 1878. Our views coincide in every particular with those expressed by our distinguished friend, the popular member from Baltimore City.

SALE OF A JERSEY COW.—Mr. J. Henderson of this city has lately sold a Jersey cow 3 years old 17th, March 1878, for \$150 to a gentleman of Md. She was fresh, Mr. H. retained the calf—Jerseys are growing in popularity in this State.

The Agricultural College.

The nineteenth annual commencement of the Maryland agricultural college took place at the institution, on the 25th June. The exercises were opened with prayer by Rev. Dr. Williams, of the Bladensburg P. E. church, and followed with the salutatory addresses by Samuel Cissel and an essay upon agriculture by John Matthews, of Port Tobacco. Essays were read, interspersed with music by the college band, by several of the students and the valedictory delivered by Mr. T. T. Houston, to whom a prize medal was awarded.

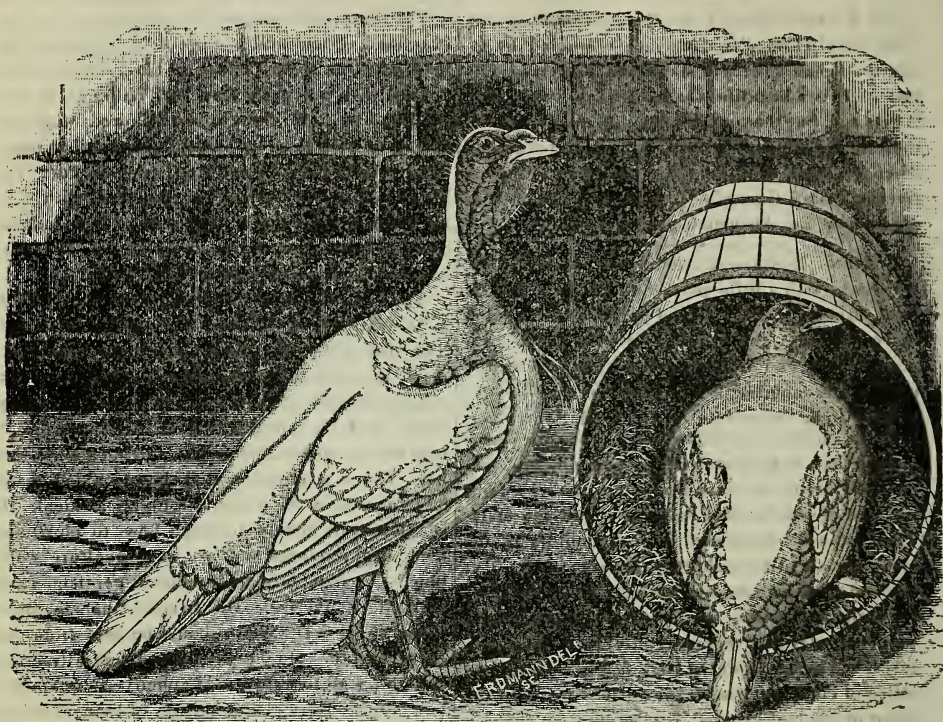
The exercises were under the direction of Prof. J. D. Warfield, of the chair of English literature. The Hon. Eli J. Henkle delivered the annual address, in which he disclaimed any intention of discussing education, as its importance was recognized by all. He said this was an agricultural college for agricultural education. What should that be? This is a question that has troubled many and has caused the institution to be assailed. It should not be merely to teach how to plow and hoe, but the science and art of agriculture combined—to make farmers intelligent gentlemen and rural life attractive. He advised that in these times, so hard, the youth should be kept from the cities and be taught to make home attractive—and above all to cultivate simplicity—to retain and cultivate country characteristics of living, and not to imitate the city. It is a mistaken idea to think everything city right and everything country wrong. Buildings, furniture, &c., should be suited to the country; and while tasteful and comfortable, they should be simple. Tilling of the soil is the noblest of all vocations—free from a thousand cares that afflict others. Since the organization of the college 1,202 students have been registered, and there are eighty-two now in the institution. There were no graduates this year.

UPPER MARLBRO' GAZETTE.—This old and popular weekly has entered on its 43rd year with all the vigor of youth and the sterling qualities which it has manifested from its first issue under our life-long friend, the late, greatly lamented, Hon. Geo. W. Wilson. It has descended from father to son, and thus far, we can say, "a worthy son and successor of a worthy sire"—We had lately a pleasant interview in our office, with I. S. Wilson the able young editor of this popular Southern Maryland weekly.

CATALOGUES RECEIVED.

Catalogues received from Ellwanger & Barry Mount Hope Nurseries, Rochester, N. Y., catalogue No. 3 descriptive of plants and illustrated. W. A. Burpees, Illustrated Descriptive Catalogue of Thorough-bred Live Stock, Philadelphia, Pa.

POULTRY HOUSE.



WHITE HOLLAND TURKEYS.

For the Maryland Farmer.

Our illustration herewith was sketched from life of a pair of White Holland Turkeys. While it gives a fair idea of the breed, yet it fails to represent their great beauty. In plumage they are a pure, spotless white, with bright red heads and long black beards on the males—altogether in pleasing contrast to a green lawn, and for a gentleman's park are very ornamental. In size they are very much larger than the common white turkey, which is quite plentiful in certain sections. They are also very hardy, and the general prejudice to white fowls as being delicate will not apply to this breed. While not so large as the Mammoth Bronze Turkey, they are much more prolific layers and are fully as profitable to raise. There is no trouble with old hens being so heavy and awkward as to break their eggs when sitting. By not allowing the hens to sit on their eggs of the first laying the second lot can be had considerably earlier in the season. One impregnation of the gobbler fecundates the entire laying. It has been proved by experiment that if the young turkeys be fed on soft feed, mixed with *milk* instead of water, much

superior and more tender meat will be produced. Young turkeys until they "shoot the red" should be carefully guarded against any dampness. Feed soaked bread, with hard boiled eggs mashed up, four to five times a day. After ten days or a fortnight give them curds and soft feed generally, until five or six weeks old. Turkeys moult very rapidly, and at this critical period should be well supplied with stimulating food. The hens never moult until through laying, and their sitting must be so regulated that they will be through moulting before cold weather. Turkeys are very fond of Dandelion leaves, and it is well to have some growing within easy access. Great care must be exercised in selecting breeding stock and properly attending to them. A little observation will teach their simple requirements, and they can be made a most profitable farm stock. Narrow roosting perches are a prolific cause of "crooked breast"—i. e., all the meat developed on one side of the breast-bone—are to be avoided.

W. ATLEE BURPEE.

Philadelphia, Pa.

For the Maryland Farmer.

An Enjoyable day at "The Manor"

THE COUNTRY RESIDENCE OF HIS EXCELLENCY,
GOV. CARROLL.

Messrs. Editors:

Probably the citizens of Howard County never spent a more delightful day than was enjoyed by them on Friday last at Gov. Carroll's delightful summer residence, "The Manor." It had been announced for several days previous, that on that day there would be a trial between two great labor saving machines, the Osborne and the McCormick Reapers and Self Binders. The saving of labor, the all important effort, not only of the farmer but of the manufacturer, and in fact of all mankind, as a matter of course created a great deal of interest amongst the farmers, and they turned out in goodly numbers to witness the machine that, as if by magic, was to do away with five or six hands to a reaper, and bind their wheat for them better, yes for better as it afterwards proved, than it could have been done by hand.

The day although threatening and partially cloudy was all that could have been desired; when at times the sun *did* peep out from behind the clouds, its heat was so penetrating, that, to us, a casual observer, it seemed that it would certainly be humane to put Self-Binders into active operation, if for nothing else, to save humanity from trudging after a reaper, under the burning rays of the sun, working as fast as their hands would permit them at that "break-back" job of binding.

The people began to assemble about twelve o'clock, and by one o'clock there was a large assemblage of the leading citizens of the county. Before going to the field, at the Governor's invitation, all partook of a lunch, wherewith to improve the "inner-man", and we presume, better fit him to pass judgment on the success of the Binders.

Upon arrival at the field where the contest was to take place we were disappointed to learn that the McCormick Machine had not made its appearance, but "The Osborne" was there put up and ready for use. It was said by many that the field was the worst in the county, and the best judges were of the opinion that the best portion of it could not be cut by any machine. Prior to last Tuesday it had been as fine a field of wheat as one could want to see, but the terrible storm of that day had beaten it down so terribly, that at least one-half of it lay flat on the ground. The machine however, proved itself a success beyond the utmost expectations of the Governor and of all present. It cut the down wheat to perfection, and an expert going over the ground after it, could not have told from the stubble which had stood erect and which was down.

Its binding, which of course after all, was the main feature, was beautifully done. In standing wheat every sheaf was perfect, and was bound tightly and far better than it could have been done by hand. In the down wheat it had a difficulty to encounter in separating the sheaves, the butts of the wheat being terribly tangled, the sheaves would also get tangled, and although every sheaf was bound entirely by itself, it would become entangled with the next one following it and the two would be thrown to the ground together. This however is of no consequence, as it can easily be overcome and *will be* in the future. Mr. Kyle the operator of the machine, certainly did himself honor and was highly complimented on the success with which he had worked it.

The contest over (or rather the exhibition, for the other machine failing to appear, it could scarcely be called a contest.) The guests were invited to return to the mansion, and there during an hour and a half, was enjoyed one of those good old times, such as have made the "Manor" famous during the past century.

Under the welcome shade trees on the lawn was a long row of tables, spread to overflowing with the delicacies of the season, and eating, drinking, speech-making and good a time generally became the order of the day. Henry E. Wootton Esq. their distinguished "District Attorney," paid a high compliment to the operator of the Binder, and congratulated him on his success, "not more successful however, said Mr. Wootton has this Binder been in gathering and binding the wheat from the Governor's field, than the Governor himself has been in gathering the good will and wishes of his fellow citizens, and in binding them together with that cord of friendship which can never be broken."

Mr. Wootton's remarks were followed by short speeches from Gov. Carroll, Dr. Watkins, Dr. Keene and Mr. Clark of the Ellicott City Times. Gov. Carroll during his remarks jocosely said: "I presume if some of our opponents should learn of our meeting here to day, they would say it was a meeting of the "Ring." This remark caused considerable merriment, as the whole affair was so purely agricultural, (the Governor himself appearing as a farmer and not as the Executive Officer of the State) that a stranger would never have known himself to have been amongst politicians.

Amongst those present, besides the gentlemen above named were Thomas H. Hunt, Jas. D. Cook, Jno. R. Brown, Samuel Brown, W. S. Kennedy, Rev. Father Griffin of St. Charles College, O. D. Thompson, Sheriff Jas. Hunt, Ex-Sheriff E. A. Talbot, Jno. H. Herbert, Harper Carroll, Dorsey Rogers, F. W. Whitman, of E. Whitman, Sons & Co, Baltimore, Thomas Clark editor of Ellicott City Times, Jno. J. Verney, Mr. Judick and Julius Wosch, Benjamin Stewart of Stewart & Price, Frederick, Md. and Joshua Dorsey.

The Hessian Fly and the Peach Crop.

On the 26th of May, Col. Wallace of Cambridge Md. handed to us a bunch of superior heads of wheat, of the Fultz and Tappahannoc varieties, well filled with plump grain and nearly in the dough-state, showing the earliness of the season. The stalks were green and free from rust, but the leaves were yellow and full of rust. Col. W. is a successful farmer and observant naturalist. He says, he does not fear the Fly in wheat; thinks that every bane has its antidote, and the Creator sends these pests to agriculture that the ingenuity and industry of man may be invoked to circumvent these pestiferous insects, which effort will always be successful, and quoted from Judge Buell of the old Albany Cultivator to sustain the proposition that these periodic afflictions are blessings in disguise. He believes that underdraining, high culture and rather early seeding of wheat, will baffle the efforts of the Hessian Fly, which has its season to lay its eggs, and an instinct to deposit it upon plants so situated as will remain weak and feeble, giving little resistance to the young fly, while strong growing plants will prevent any serious harm from the insect. He reports a very short crop of fruit on the Eastern Shore. Around Cambridge there will be a great falling off of Cherries and Grapes and no Peaches. His Peach orchard contains several thousand trees, and is certain he will not get enough to serve his own family. This is bad news for the lover of Peaches, but we hope this delicious fruit has not failed so badly in other Peach districts, yet we are inclined to believe the crop will be a small one. We have reports from quarters of the falling of the fruit, from the effects of the late frost, so great that it is thought the entire crop will not exceed one million of baskets.

APHIDES AVENAE.—A very small green Fly commonly called "plant louse" has infested to a considerable extent the wheat fields in Prince Georges, Carroll and other counties. As the name Aphides indicates that they *exhaust* whatever plant they sieze upon whether wheat or cabbage. On the latter a doze of sulphur, and a small quantity of carbohc acid in soap suds, will effectually destroy them; tobacco water and soot will do so also.

In the vicinity of Paris 6000 men, woman and children are engaged in growing asparagus, lettuce, &c.; the rent of the land varies from \$180 to \$240 per acre, according to situation and irrigation. Gardeners average from 1½ to 2½ acres in extent. It requires a capital of \$2500 to carry on such a garden.

PUBLICATIONS RECEIVED.

We have received the interesting report of Dr. Franklin Hough on *Forestry*, prepared under the direction of the Commissioner of agriculture, Hon W. G. Le Duc—and published by congress. It is a large volume and full of statistical information. **FLORAL AND FRUIT MAGAZINE:** We are pleased to see again on our table, this meritorious publication, issued in Washington City, and edited by Col. D. S. Curtis. Its intrinsic merits will doubtless command a very extended patronage—As a special organ, it would be of great value to the Potomac Fruit Growers Association and the lately organized Horticultural Society of the District of Columbia. Harmonious working together of these three institutions would very effectually advance the interest of each. We wish our gallant friend great success.

THE AMERICAN POMOLOGICAL SOCIETY'S REPORT.—Our thanks to President Wilder for the report of the meeting of the society in this city last September. It is one of the most valuable documents that has ever emanated from that great association and its eminent officers and members. The catalogue of fruits is a work of labor and great care, with the report of its revision by the committee of which the eminent pomologist, Barry of Rochester N. Y. was chairman. This report is of immense value to fruit growers in every section of the country and to every agricultural writer, for reference.

The July-August number of the popular and valuable **INTERNATIONAL REVIEW** contains articles by Karl Blind, Philip Gilbert Hamerton, Charles Gindriez, Hon. John Bigelow, General James Harrison Wilson, Edward Atkinson, Esq., of Boston, Rev. Samuel Osgood, D. D., James Anthony Froude, Ex-President Mark Hopkins, and David A. Wells.—This is a great journal ably edited.

"**MADAME POMPADOUR'S GARTER,**" is the name of a new thrilling and historical romance of the reign of Louis the Fifteenth, by Gabrielle De St. Andre, now in press and to be published in a few days by T. B. Peterson & Brothers, Philadelphia. It is a romance of the days of Madame Pompadour, is a story of love, intrigue and facts, and will no doubt prove to be one of the most popular and successful novels that have appeared in print for years, for its pages will be courted and perused by all that are fond of a thoroughly good novel for its great and absorbing interest. It will be issued in great uniform style and price with "Theo," "Kathleen," "Cabrielle," and "Miss Crespigny," published by the same firm.

SHEEP HUSBANDRY IN THE SOUTH.—Prepared by John L. Haynes, sec. Nat.—A. W. M. at the request of Hon. A. H. Stephens and others. This book of one hundred pages is full of statistics and practical matter connected with sheep raising wool growing and manufacturing in this country, and takes an enlarged view of this great industry, in its political as well as social aspects—It really is of great value to every wool grower in the United States, particularly does it commend itself to the Southerners. We shall make several extracts from it hereafter.

Cultivation of the Grasses and Forage Plants, at the South, BY C. W. HOWARD, Kingston Ga. Price 35 cents.

Farming with Green Manures, BY C. HARLAN, M. D., Wilmington, Del. Price 50 cents.

Both these pamphlets are highly valuable. We shall make further comments and extracts from them, in a future number of the MARYLAND FARMER.

DOMESTIC RECIPES.

We give the following from our highly esteemed old exchange—The Marlboro' Gazette—and can vouch for the rare excellence of the Wilson and the Henkle Blackberry wines, having once or twice enjoyed them enough to wish for a renewed acquaintance. *Pass the bottle gentlemen!*

Blackberry Wine.—The season for making this pleasant beverage is approaching. We give below two recipes for making it. The first one has been used by us for several years, and is highly approved. The second is from Hon. E. J. Henkle, of Anne Arundel, and his wine is, we think the best made in that county. Try them and send the editor a bottle:

"Our" Way of Making Blackberry Wine.—Measure your berries and bruise them; to every gallon adding one quart boiling water. Let the mixture stand twenty-four hours; stirring occasionally; then strain off the liquor into a cask, to every gallon adding two pounds of sugar, cork tight and let it stand to the following October, and you will have wine ready for use, without further straining or boiling.

Dr. Henkle's Way.—Take 100 quarts of blackberries, crush them and press out the juice. Then dissolve 110 lbs. white sugar in 20 gallons cold water. Measure the syrup; add the juice, and as much more water as will be required to make 40 gallons in all. If you want to make a smaller quantity preserve the above proportions. After putting it in the cask (one that has recently had whiskey is preferred,) set it in the cellar or other cool place with the bung open to the air until Christmas. Then stop tightly or bottle it.

Blackberry Cordial.—To two quarts of juice add one pound of white sugar; half-ounce nutmeg; half-ounce cinnamon, pulverized; half-ounce cloves, pulverized. Boil all altogether for a short time, and when cold add a pint of brandy.

This syrup is said to be almost a specific for summer complaint or diarrhoea. From a teaspoonful to a wine glass is to be taken, according to the age of the patient, until relieved. It has been made and successfully tried in the family of the editor of the GAZETTE for many years.

Current Wine.—To a quart of juice add three quarts of water and four pounds of sugar brown or white.

Another.—Two quarts of juice and two quarts of water, to which add four pounds of white sugar. Mix all, and put it in a nice keg, where it had better remain a year, though it is good to use in six months.

GOOSEBERRY JAM.

Take as many as you require of ripe, red, rough gooseberries; put them into the preserving pan, and as they warm, stir and bruise them to bring out the juice. Let them boil for ten minutes, then add sugar in the proportion of three quarters of a pound to every pound of fruit, and place it on the fire again; let it boil slowly, and continue boiling for two hours longer, stirring it all the time to prevent burning. When it thickens, and is jelly-like on a plate when cold, it is done enough. Put into pots, and allow it to remain a day or two before it is covered.

RASPBERRY JAM.

Weigh equal quantities of fruit and sugar; put the fruit into a preserving kettle; boil and mash it; let it boil very quickly, and stir constantly; add the sugar, and boil half an hour. Jam made in this way is of a finer color than when the sugar is put in first.

BLACK CURRANT MARMALADE.

Take ripe black currants, and, having stripped them off the stalks, stew them very gently, bruising them a little at first in the preserving-pan, to let the juice run out; turn them about frequently and in about ten minutes or a quarter of an hour they will be tender. About three parts of the juice should be poured off for jelly, the remainder is to be rubbed with the fruit through a sieve. Having weighed the pulp, let it boil rapidly for about a quarter of an hour, or longer, according to the quantity; then add, for every pound of pulp, half a pound of powdered loaf-sugar, and stir it until entirely dissolved. Let the marmalade boil briskly for ten minutes, still stirring it frequently; pour it into small pans or pots; and, when cold, it ought to cut out firm and solid.

LADIES DEPARTMENT.

A Chat with the Ladies for July.

BY PATUXENT PLANTER.

A Farmer's Life.

The day is past ; the evening dews
On sprays and flowers appear,
While lengthened shadows gently fall
O'er fields and meadows near.

The little songster full of glee,
Who all day long did sing,
Now rests his tired drooping head
Beneath his downy wing.

The lazy cows, with udders full,
How patiently they wait
To see, with joy, the first approach
Of the milkmaid at the gate.

The weary farmer now is through,
His toilsome work is o'er,
With cheerful face and lighter heart
He hastens o'er the moor.

To yon sweet cottage now he turns
His bright and sparkling eye ;
To see who will meet papa first
The eager children vie.

His wife, in tidy dress, appears
To meet him at the gate,
And then they walk back arm in arm,
A king and queen in state.

Oh, happy is this woman, free
From care and envious strife ;
Thrice happy is the man who has
So true and dear a wife.

The table with its snowy cloth
And plenty now is spread ;
Then with their grateful hearts they thank
The giver of their bread.

Oh, who would not with envy see
A farmer's happy life ?
What woman would refuse to be
A prudent farmer's wife ?

F. A.

I find this beautiful pen-picture of an every day scene in our country homes, and it so truthfully depicts that subdued happiness to be derived from rural life by two sensible, unambitious loving hearts that I have copied it from *The South Georgia Agriculturist*—a monthly newly established, in the South, which in every respect reflects upon its Editor, L. C. Bryan, Esq., Thomasville Georgia, the highest credit, and I wish it may meet with that success it merits while it continues to speak such pure sentiment and present such touching pictures as we have in the little poem quoted above. I have an object in view in repeating these lines. How many educated and refined ladies look upon married life in the country with contempt and fear—as a life of drudgery and loneliness, without a single ray of sunshine, because they see the glare and outside show of town-life,

and never have seen the purer life and the truly happy content that wedded love brings, in the country, where nature is one continuous song of love and gratitude to the creator. Let those who scorn a home in the country, yet have loving hearts and educated minds, once appreciate by actual seeing, such an evening as the poet describes and I am sure they would fervently join in the question—

“What woman would refuse to be
A prudent farmer's wife ?”

Early one morning—one of those beautiful, cool mornings we had in June, I spent an hour in the flower garden of the Viaduct Hotel, admiring some old time flowers that the good taste of the gardener cultivates with novelties of the newer sorts. They were vivid reminders of days long past, calling up many happy scenes of my youth, yet sadly reviving memories of loved ones never more to “meet me at the gate”

The old sorts of flowers which have been improved are to my mind more beautiful than most of the plants introduced from foreign lands. The common old Hollyhock, once so flaunting and coarse a decoration of the gardens of humble people, are now remarkably attractive. *Vick's Monthly Magazine* for June has a fine colored illustration of some very double ones of exquisite colors.

In the garden at the Hotel the hollyhocks were tall, and the stems loaded with brilliantly colored flowers, very double and big as saucers—of varied colors, white, red, yellow, creamy, lemon, pink and maroon with shadings of these decided hues. At a little distance they were as beautiful as roses and to my eye they compared favorably with any flower I have ever seen. They seem like they united the rose, dahlia and zinnia in one mystic combination. Then there were the Balsams or Lady Slippers, the Larkspur with its crowd of gay, many hued, curiously shaped flowers, so tempting to little folks to weave wreaths, crosses, &c. We also found a fine collection of Spireas, which lovely shrubs ought to be in every garden, and choice roses of great variety. A single Spanish cork-oak is flourishing in the open air and five feet high. This is a European species of oak, the bark of which furnishes cork when the tree gets to be 20 years old or sooner in their native clime. There are some very rare plants and some uncommonly pretty, whose botanic names I cannot recall, and they seemed to have no common nomenclature.

I give you a short article in *Vick's Illustrated Monthly* by a writer, showing you how much pleasure may be derived from a small space and how many flowers may be grown with a very little labor. Why should not each one try and imitate the writer and yield to the “*Influence of flowers*”

"There is a presence—a spirit in the woods that becomes domesticated in the garden. The "solitude" of the garden is pleasing, because in reality it is the choicest championship. I would not have statues in a garden. The timid sylvan spirits that might hide behind a rock or a fountain, would flee from the glare of cut marble.

Then, how many things a little ground will make room for. My garden is scarce four square rods, and yet it would make a respectable catalogue to name all the plants in it. Almost all the countries of the earth have contributed to it; and though I think that Flora has been about equally generous to all parts of the world, it is a satisfaction that our republic of flowers, like our political one, should be strengthened from all countries. The growth of flowers, too, is full of surprises; you watch for the bloom of a favorite with great interest, to-day you can find no sign of a bud, to-morrow the sly thing will, perhaps, show you one half developed. Something has come to you from half round the world, you have read descriptions or seen pictures of its flowers, and you know just how they look; or, you are watching patiently for a bloom you do not know, but suppose to be very rare and beautiful—or you failed to get flowers from a plant last year, and you do not think it will do better this year—in these, and a hundred other ways, they surprise, please and disappoint you, and keep up your interest, so that having once fairly made their acquaintance, you dislike in a double sense to cut them."

Among the beautiful hardy climbers, we have a great variety, imported from England, of the Clematis family, so familiar to us all as the Virgin's bower, found in Virginia, Maryland and other Southern States growing in the woods and in moist low ground, in wild luxuriance. Mr Dreer furnishes me with this cut, showing a clematis Fortunei, large, double white.



The Jackmani variety is large, rich violet purple and very splendid. The English florists have paid great attention of late years to this interesting, hardy and beautiful climber, and they are now to be had of every color, and immense size. Hardy vines and creepers, Honey-suckles, Ivy, Mistaria, climbing Roses, &c. should all be found in every garden, over rock work, fences, frames, posts, porches and walls and clustering around door ways and windows, and be trained on the sides of a house that has not windows enough to relieve the disagreeable sameness of a jail-like wall.

Making Home Attractive.

BY D. Z. EVANS, JR.

There is no one thing which proves more conclusively the culture of a person than the tasty appearance of surroundings of his dwelling. There are some farmers who bestow so much time upon hard, manual labor in the fields as to have no time to make their yards, or grounds surrounding their houses, attractive, and permit those pleasant home attractions to be kept as matters of mere thought, not caring to spend the few moments each day which go so far towards pleasing the eye, not only of his own family, but of passers by. Unless home surroundings, as well as matters inside the house, be made pleasing and attractive, it is useless to try to persuade your sons who are growing up to man's estate, that home is far preferable to seeking a livelihood elsewhere. Cultivate a taste for the beautiful in nature by having flowers and shrubbery in your yards and you will never regret it. The cost of a few flowers and shrubs each year is but trifling, compared to the enjoyment to be realized there from. How pleasant and refreshing it is to the weary farmer, to see neatly arranged flowers around his house and a few choice and well apportioned rose bushes, dotted here and there, only those who have tried it can tell.

The work of attending to those flowers should not all be left to the female portion of the household, for they have an unceasing round of duties which devolve upon every true farmers family, tho' they would gladly, if they had the time, give the flowers every requisite attention, but let the men folks turn in and help a little each eve, when work is not too pressing, thus pleasantly and profitably employing a half or quarter hour, which would be devoted to enhancing the attractiveness and value of the place.

In a mere pecuniary sense, it pays well to care for the house and the surroundings—to plant flowers, shrubbery, roses, trees &c., and to keep the paths nicely cleaned out, for a farm will command several hundred—if not thousand dollars more when it pleases the eye of the would-be-purchaser, than would a farm which has an illy kept yard, with the fences out of repair and the paths grown up with weeds and grass. Yet we are sorry to say that the majority of farmers homes are greatly neglected, while the number which have had care and attention bestowed upon them, to beautify the yards is deplorably small;

THE TWO GLASSES

There sat two glasses, filled to the brim,
 On a rich man's table, rim to rim.
 One was ruddy and red as blood
 And one as clear as the crystal flood.
 Said the glass of wine to the paler brother:
 "Let us tell the tales of the past to each other;
 I can tell of banquet and revel and mirth,
 And the proudest and grandest souls on earth
 Fell under my touch as though struck by blight,
 Where I was king, for I ruled in might.
 From the heads of kings I have torn the crown.
 From the heights of fame I have hurled men down;
 I have blasted many an honored name;
 I have taken virtue and given shame;
 I have tempted the youth with a sip, a taste
 That has made his future a barren waste,
 Far greater than a king am I,
 Or than any army beneath the sky.
 I have made the arm of the driver fall,
 And sent the train from the iron rail,
 I have made good ships go down at sea,
 And the shrieks of the lost were sweet to me;
 For they said, "Behold how great you be!"
 Fame, strength, wealth, genius, before you fall,
 For your might and power are over all.
 "Ho! ho!" pale brother laughed the wine,
 "Can you boast of deeds as great as mine?"
 Said the water-glass: "I cannot boast
 Of a king dethroned or a murdered host;
 But I can tell of a heart once sad
 By my crystal drops made light and glad.
 Of thirst's I've quenched, of brows I've laved.
 Of hands I have cooled and souls I have saved;
 I have leaped through the valley, dashed down
 the mountain,
 Flowed in the river and played in the fountain,
 Slept in the sunshine and dropped from the sky
 And everywhere gladdened the landscape and eye;
 I have eased the hot forehead of fever and pain,
 I have made the parched meadows grow fertile
 with grain.
 I can tell of the powerful wheel of the mill,
 That ground out the flour and turned at my will.
 I can tell of manhood, debased by you,
 That I lifted up and crowned anew.
 I cheer, I help, I strengthen and aid;
 I gladden the heart of man and maid!
 I set the chained wine-captive free,
 And all are better for knowing me."
 These are the tales they told each other,
 The glass of wine and paler brother,
 As they sat together filled to the brim.
 On the rich man's table, rim to rim.

Correction:—By an unaccountable error, in setting the paper in page form the article on "*Fruit Dryer*" was incomplete, and the following portion left out. The reader will please refer to page 230 and add the following:

pipe-hole is made in the hogshead opposite the door to let the smoke out, so that none of it ascends through the box. Now, the lid of the box is swung with hinges, making one whole side of the box open. Nail cleats to each side of the box on which to rest the open crater for the fruit. The craters or open shelves should be about three inches, one above the other. Close the door, heat with coal or wood, and in about ten hours you will have the cleanest sweetest fruit you ever tasted.—*A. H. Bradford in Rural World.*

FINE OATS.—Some remarkably fine specimens of oats have been received. One is a bunch of stalks, from John Mitchell, on Mount Felix farm, near Havre de Grace.—They measure nearly six feet in length, and some of the heads are 13 inches long.—Mr. Mitchell calls them the "Mountain Ecclesia." The seed was obtained two years ago from the Agricultural Department, at Washington. The oats weigh from 38 to 41 lbs. to the bushel, the product being 45 bushels to the acre. At the standard rate, 32 lbs. to the bushel, this would make a yield of nearly 60 bushels per acre. The stock is unusually thick and strong and Mr. Mitchell says this variety is not liable to be thrown down.—They are uniform in size throughout the field.

Mr. J. S. Richardson has also sent to our office specimen stalks of oats taken from his field near Bel Air. They measure 6 feet 5 inches long, and are as thick and strong as those above noted. The blades of both the above specimens are more than an inch broad, and the stalks resemble corn. They would make good fishing-rods when dry, or might be used for walking-canes. They may be seen at our office.

Some stalks of oats from Mr. John Moores' farm, "Highlands," are 5 feet 10 inches in length and are finely headed.—*Egis and Intelligencer*, Bel Air, Harford Co., Md.

Col. Edwin H. Webster, of Bel Air, has a pure bred Jersey cow, that yields fourteen pounds of gilt-edged butter a week. His herd of Jerseys are among the best in the State.—*Belair Egis*